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HIGH SCHOOL AND UNIVERSITY
MATRICULATION EXAMINATIONS BOARD
DEPARTMENTAL EXAMINATIONS, 1917

GRADE VIII.

AGRICULTURE.

Time—Two hours.

Values.

- 3 1. (a) What characteristics of soil and subsoil would you prefer if you were selecting a homestead for general farming purposes?
- 4 (b) Explain how the surface soil may have been formed on this homestead.
- 4 (c) Give two reasons why a knowledge of the subsoil should influence your choice.
- 4 2. (a) In selecting an ideal location for a home garden or a prairie farm what four things would you take into consideration?
- 3 (b) How would you prepare the soil for the first garden crop?
- 3 (c) Describe briefly the construction of a simple hotbed.
- 5 3. (a) What five benefits may be derived from tree-planting on the prairies?
- 5 (b) How would you proceed in the setting out of a good windbreak?
- 5 4. (a) What is meant by a crop rotation?
- 7 (b) What are the advantages to be derived from adhering to a good system of rotation of crops?
- 11 5. Describe briefly the manner in which summer fallowing should be practised.

(OVER)

Values.

- 4 **6.** (a) Name four ways in which weeds cause a loss to farmers.
- 4 (b) Give four ways in which weeds spread.
- 4 (c) Describe the appearance and habits of two of the following
 weeds, and give method of eradication:
 Wild mustard, Russian thistle, black bindweed,
 stinkweed, wild oats.
- 6 **7.** (a) Explain how seed selection may improve the quality of
 the farmer's crop of wheat or oats.
- 6 (b) How should selection be practised with the view to
 improving the potato crop?
- 4 **8.** (a) What is meant by dry-farming?
- 4 (b) What conditions make dry-farming necessary?
- 4 (c) Explain how the practice of dry-farming is carried out.
- 10 **9.** Give three reasons why live stock should be raised on the
 farms in Alberta.



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GRADE VIII.

ARITHMETIC AND MENSURATION.

Time—Two hours.

Values.

1. On January 8, 1917, you gave James Bogue, of Hardisty, Alberta, your note for \$120.00 to run for seven months and to bear interest at 9 per cent. per annum.
 - 5 (a) Write the note.
 - 5 (b) Find the date of maturity.
 - 12 (c) How much will it take for you to get back the note when it is due?
- 15 2. If the average allowance of food per day for the British soldier is 25 ounces, how many tons of food would be required to feed the British armies (estimated at two millions of men) for the month of January?
3. A farmer has a large rectangular field of wheat and he wishes to know the number of acres in it.
 - 4 (a) What measurements would he have to make?
 - 4 (b) What unit of measurement would he most likely use?
- 15 4. Find the cost of plastering the walls and ceiling of a room 14 feet high, 31 feet long and 24 feet wide at 30c. per square yard. In the room there are five windows and three doors; the plasterer allows a square yard off for each window and door.

OR

- 15 5. A wheel of a Ford car has a diameter of 30 inches. How many revolutions will it make in going from Hardisty to Loughheed a distance of 13.7 miles?

(OVER)

Values.

- 15 **6.** A house worth \$5,000.00 is insured for $\frac{4}{5}$ of its value at 2% to cover 3 years; the taxes are 23.2 mills on the dollar; the expense for repairs each year amounts to \$120.00. If it is rented for \$75.00 per month, find the rate per cent. made on the investment.
- 8 **7.** A body of French soldiers dug trenches as follows for three days: 5 Km 4 Hm 7 m, 9 Km 2 Dm, 8 Km 9 Hm 7 Dm 6 m. Find the length of the trench dug, expressing your answer in the above units.
- 7 Using decimals express your answer in kilometres.
8. If 3 inches of snow make one inch of water and the average depth of snow on a section of land is 18 inches—
- 10 (a) Find the number of cubic feet of water on the section.
- 5 (b) Find the number of gallons correct to the nearest gallon. A gallon contains 277.274 cubic inches.
- 15 **9.** An agent sold three cars of wheat for Mr. MacDonald, of Calgary, as follows:
- 1497 bushels No. 2 @ \$1.67 per bushel.
1121 bushels No. 1 @ \$1.82 per bushel.
1599 bushels No. 4 @ \$1.33 per bushel.

If the agent charges a commission of 2.5 per cent. and the cars cost \$125 for the three, find the net proceeds due Mr. MacDonald.



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GRADE VIII.

ENGLISH LITERATURE.

Time—Two and one-half hours.

Values.

1. "She dropped her glove to prove his love,
then looked on him and smiled;
He bow'd and in a moment leap'd among
the lions wild.
The leap was quick, return was quick,
he soon regained his place,
Then threw the glove but not with love
right in the lady's face!"
 - 8 (a) Describe carefully the scene, and circumstances of this incident.
 - 3 (b) What was the lady's real reason for dropping her glove?
 - 3 (c) Why did de Lorge risk his life?
 - 4 (d) Tell in your own words what the King said regarding de Lorge's treatment of the lady.
 - 3 (e) What lesson does the story seek to teach?
2. "When they had ended, from his place apart
Rose the preceptor to redress the wrong."
 - 10 (a) State carefully and in some detail *any two* of the arguments used by the preceptor in his plea for the birds.
 - 12 (b) Explain the following expression taken from this poem:
"Cassandra-like prognosticating woe."
"The very St. Bartholomew of birds."
"Their race in Holy Writ should mentioned be."
"The skeleton that waited at their feast
Whereby their sinful pleasures were increased."

(OVER)

Values.

- 15 3. Quote fifteen consecutive lines beginning with any *one* of the following:

“The leper raised not the gold from the dust:”

OR

“The old order changeth yielding place to new,”

OR

“All hail to the day when the Britons came over.”

4. “In many climes without avail

Thou hast spent thy life for the Holy Grail;
Behold it is here—this cup which thou
Did'st fill at the streamlet for me but now.”

- 6 (a) Relate the circumstances under which these lines were spoken.

- 6 (b) Explain what is meant by saying that this wooden cup has become a holy grail.

5. “There was never a leaf on bush or tree,
The bare boughs rattled shudderingly;
The river was dumb and could not speak
For the weaver winter his shroud had spun;
A single crow on the tree-top bleak
From his shining feathers shed off the sun.
Again it was morning, but shrunk and cold
As if her veins were sapless and old
And she rose up decrepitly
For a last dim look at earth and sea.”

- 4 (a) What feelings does the poet seek to arouse by his description of this scene?

- 7 (b) How is this effect produced? Answer by referring to any special feature of the description, and to the peculiar fitness of any of the words or phrases employed.

- 9 (c) Explain:

“The river was dumb”;

“The weaver winter his shroud had spun”;

“She rose up decrepitly”.

- 20 6. Mention the selection from which each of the following extracts is taken. Explain the quotations, and give as closely as you can, the connection of each:

- (a) “The blackening wave is edged with white
To inch and rock the sea mews fly.”

- (b) “Do you not know me? Does no voice within
Answer my cry and say we are akin?”

- (c) “Shall not our love this rough sweet land make sure
Her bounds preserve inviolate though we die?”



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GRADE VIII.

COMPOSITION.

Time—Two hours.

Values.

- 15 1. Copy the following sentences, punctuate them and make the necessary division into paragraphs:

A well known English actor was travelling on a train to Birmingham when it stopped at the village of Banbury the actor being hungry determined to buy some of the famous Banbury buns so he put his head out of the window and seeing a boy on the platform called to him hello my good boy here is three pence run and get me two Banbury buns and you may keep one for your trouble but be quick about it just as the train was about to move off the boy ran back eating a bun he put some coppers into the actor's hand saying this is the change bother the change said the actor where is my bun there was only one left said the boy and I am eating that

- 25 2. Write a short description of the work of *one* of the following:
The carpenter, the blacksmith, the farmer, the milliner.

Use the following outline:

- (a) What materials are used in the work?
 - (b) What tools are required?
 - (c) How is the trade learned?
 - (d) What school studies help him in his work?
- 20 3. Write a letter to a friend expressing thanks for a birthday greeting, and inviting him to join your camping party for a week during the holidays.

(NOTE.—Candidates will use names and addresses other than their own.)

(OVER)

Values.

40 4. Write a carefully planned composition of about 40 lines on
 one of the following subjects:

- (a) The Story of David Swan.
- (b) How birds conceal their nests.
- (c) What the moon saw on the prairie one night.
- (d) The Fur Trade in early Canada.
- (e) The Story of Maud Muller.
- (f) A comparison of Summer and Winter Sports.
- (g) A Threshing Scene.
- (h) Champlain's career in Canada.



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GRADE VIII.

DRAWING.

Time—Two hours.

NOTE.—In the case of questions 2, 3 and 4, answer (a) or (b) but not both.

Values.

- 12 1. Represent from memory a common flower using pencil, water color, or crayon.
- 20 2. (a) Using the flower drawn in (1) as a motif make a design for a surface pattern unit and repeat this a sufficient number of times to show the spacing you consider most suitable for the surface pattern.

OR

- (b) Using the flower drawn in (1) as a motif make a stencil design for a border. Explain how you would cut and use the stencil.
- 10 3. (a) (1) What is meant by a color scheme?
(2) What color would you mix with a green to reduce its intensity?

OR

- (b) (1) Illustrate an analogous color scheme by making flat tones of water color or crayon.
(2) Make washes of the secondary (binary) colors.
- 18 4. (a) Draw an open book illustrating the principles of one point perspective.

OR

- (b) Make a sketch of an animal or a bird from memory.



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GRADE VIII.

ARITHMETIC—RAPID CALCULATION.

Time—Thirty minutes.

NOTE to Presiding Examiner.—Candidates shall be given this paper immediately after the time allotted for the problem paper has expired.

NOTE to Candidates.—Results only are to be put down on this paper, which is to be handed in with the other Arithmetic paper.

Values.

- 10 1. Add vertically and horizontally and prove the correctness of your work by adding the results.

			Totals
765,321	987,654	394,857	
94,983	98,765	20,394	
9,347	9,876	1,982	
213,312	456,789	5,287	
5,679	45,678	97,654	
999,999	4,567	888,888	
Totals			

- 4 2. Find the total cost of the following:
- 2460 pounds of coal @ \$5.00 per ton..... =
- 378 feet of lumber @ \$15.00 per M..... =
- 2750 bricks @ \$18.00 per one thousand.. =
- Total.....

- 8 3. Find the product of—
- 987.324
- 19.002
-

(OVER)

Values.

8 4. Make the following calculations:

75% of 79640.....=
29.3 mills on the dollar on \$3320.00.....=
 $\frac{8}{11}$ of $22\frac{3}{4}$=
The area of a piece of paper $18\frac{1}{2}$ x $11\frac{1}{4}$...=

Values.

- (d) "A form more fair, a face more sweet,
Ne'er hath it been my lot to meet."
- (e) "Days came and went, and now returned again
To Sicily the old Saturnian reign."
7. "One argument, but not a strong one, has been used against
this confederation, that it is an advance towards inde-
pendence."
- 1 (a) From what selection is this extract taken?
- 3 (b) By whom was the speech delivered? Where? On what
occasion?
- 12 (c) Outline carefully *two* of the speaker's answers to this
argument, indicating to what extent his prophecies
regarding the future relations of Canada and the
motherland have been fulfilled.
8. "Then murmur'd Arthur, 'Place me in the barge,' and to
the barge they came."
- 12 (a) Describe the appearance of this barge and its occupants,
and tell how Arthur was received upon it.
- 12 9. Give an account of the meeting of King Richard and Robin
Hood.

OR

Write a character sketch of King Richard referring to incidents
in the selection to justify your estimate of him.



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GRADE VIII.

GRAMMAR.

Time—Two hours.

Values.

- 2 1. (a) What is meant by "part of speech"?
- 8 (b) Name the parts of speech and tell the function of each.
- 4 (c) Tell the parts of speech of "fast" in each of the following sentences:
- We fast* once a month.
He runs fast.
He is a fast driver.
The fast begins to-morrow.
2. Write sentences using the following verb forms in the third person, singular number, indicative mood:
- 2 (a) The past indefinite, passive, of the verb "take".
- 2 (b) The present imperfect, active, of the verb "make".
- 2 (c) The future perfect, passive, of the verb "finish".
- 2 (d) The past imperfect, passive, of the verb "plow".
- 2 (e) The present perfect, active, of the verb "write".
3. Parse the italicized words in the following sentences, giving the part of speech, classification, inflections, and relation of each:
- 9 (a) *Whom* did you see in the *corner* store *yesterday*?
- 9 (b) John is *older* than *James*, but is not *as* tall as he.
- 9 (c) *What* would you do if your dog, the beautiful *setter*, were *killed* by a careless chauffeur?

(OVER)

Values.

4. Divide the following sentences into their component clauses and tell the kind and relation of each clause:

12 (a) I learned afterward that the boy who found the purse knew that it belonged to your father.

9 (b) If you think carefully, you will be able to recall the time when John started to school.

4 5. (a) Write a compound, assertive sentence using the phrase, "with a gun," as an adjective.

5 (b) Write a complex, interrogative sentence using the clause, "when the train arrived," as a noun, object of the verb in the principal clause.

6. Rewrite the following sentences changing the nouns to the opposite gender forms where possible:

4 (a) The earl asked his man-servant whether his nephew, Lord H., had called.

3 (b) The czar foolishly appointed a wizard as his executor.

4 (c) The belle of the day and the heroine of the hour was the sister of the Duke of Kent.

7. Give the detailed analysis of:

4 (a) There, hidden voices all night long,
Keep up, the sedgy creeks among,
The murmurs of their summer song.

4 (b) O'er our heads the weeping willow streamed its branches,
arching like a fountain shower.



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GRADE VIII.

GEOGRAPHY.

Time—Two hours.

Values.

15 **1.** Compare the Continent of North America with the Continent of South America, under the following headings:

(a) Shape, coast line and general structural features.

(b) Drainage systems.

(c) Products.

10 **2.** (a) Draw a map of the Dominion of Canada.

6 (b) Indicate thereon, and name, the slopes that determine the drainage systems of the Dominion.

2 (c) Locate on this map the coal and the nickel bearing areas.

2 (d) Locate the grain growing and fruit growing areas.

2 (e) Locate and name two of the most important Canadian manufacturing centres.

2 (f) Outline on this map the Province of Alberta, and locate its Capital.

NOTE.—In question *two* candidates may use pen or pencil.
Names must be neatly printed and work accurate.

18 **3.** Write careful notes on *three* of the following:

(a) The Canadian fresh water and salt water fisheries.

(b) The natural resources of the Province of Alberta.

(c) The manufactures of Eastern Canada.

(d) The transportation facilities for the products of the Dominion.

(OVER)

Values.

4. Describe *either* Newfoundland *or* New Zealand under the following heads:
- 2 (a) Geographical position with respect to latitude and longitude.
 - 4 (b) Climatic conditions.
 - 4 (c) Commerce.
 - 2 (d) Relation to the British Empire.
5. A British steamer, outward bound from Liverpool, England, to Melbourne, Australia, calls at a foreign port and at a British naval station on her passage.
- 5 (a) Give a careful description of a trade route which this vessel may take.
 - 2 (b) Name and locate the foreign port and the British naval station.
 - 2 (c) Name *two* of the most important British exports in the cargo discharged.
 - 2 (d) Name *two* of the most important British imports in the return cargo.
- 4 6. (a) Name the countries that have allied themselves with Great Britain in the great European War, 1914-1917.
- 2 (b) What countries and portions of countries in Europe have been occupied by Germany and her allies in this war?
- 6 (c) Definitely locate *any three* of the following places, mentioning some important event that has happened in connection with each during the course of the war:
- Constantinople.
 - Trieste.
 - Verdun.
 - Danube.
 - Bucharest.
- 8 7. Write a careful account of *one* of the following:
- (a) The causes of the seasons.
 - (b) The factors that influence the climate of the Canadian North-West.



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GRADE VIII.

GEOMETRY.

Time—Two hours.

NOTE.—1. Options are given in questions 7 and 9.

2. Constructions and drawings must be explained.

Values.

- 9 1. Draw diagrams of and explain each of the following: An angle, a semi-circle, a quadrilateral, an isosceles triangle, a parallelogram, a tangent.
- 6 2. Two angles of a triangle are 53 degrees and 66 degrees, and the side adjacent to them is 4 inches in length. Construct the triangle and measure the remaining angle to the nearest degree and the remaining sides to the nearest sixteenth of an inch.
- 5 3. (a) A triangle ABC is given. Explain two different ways in which you can construct a triangle DEF equal to ABC in every particular.
- 7 (b) Construct two angles BAC, EDF each of 35 degrees. On the arms of these angles measure distances AB, DE each 45 millimetres in length and also distances AC, DF each 51 millimetres in length. Join BC, EF. Measure the angles B, C, F and E. State any conclusions you may be able to draw from this and other like pairs of triangles with which you have worked.
- 5 4. (a) Bisect the angle ABC. (Using compass and straight edge.)
- 6 (b) Draw a line AB 2 inches in length. Using compass and straight edge draw a perpendicular to AB from a point somewhere in the line and also draw a perpendicular to it from some other point not in the line.
5. What relations exist between or among:
- 2 (a) The angles of a triangle?

(OVER)

Values.

- 2 (b) The angles of a parallelogram?
- 2 (c) An exterior angle and the interior angles of a triangle?
- 2 (d) Angles subtended at the centre of a circle by equal chords in that circle?
- 6 **6.** AB and CD are two parallel straight lines. Another straight line EFGH is drawn to cut them. Name:
- (a) A pair of vertically opposite angles.
- (b) An exterior angle of the figure.
- (c) An angle interior and opposite to the angle chosen as exterior.
- (d) A pair of angles whose sum is 180 degrees.
- 2 **7.** (a) On what condition does a parallelogram become a rectangle?
- 5 (b) Draw a parallelogram equal in area to a triangle whose base is 5 cm. and whose altitude is 7 cm.

OR

- 2 (a) In any right-angled triangle the square which is described on the side subtending the right angle, is equal to the sum of the squares described on the sides containing the right angle.
- Draw a right-angled triangle and explain what the above statement means when applied to it.
- 5 (b) Make use of the above truth to construct a square whose area shall be 7 square inches.
- 1 **8.** (a) Draw a circle with a radius of 10 millimetres.
- 2 (b) Draw any line through its centre and from a point 15 millimetres out on it from the circumference draw a tangent to the circle. (Construction only.)
- 1 (c) How many tangents may be drawn from this point?
- 3 (d) What length will these tangents be?
- 9 **9.** Inscribe a circle in the triangle whose sides are 60, 70 and 45 millimetres in length.

OR

Construct a triangle whose sides are 40, 45 and 50 millimetres in length, and about it describe a circle.

- 10.** With centre O describe a circle whose radius is 1 inch.
- 1 (a) Draw any chord AC less than a diameter.
- 1 (b) Draw any quadrilateral ABCD in the circle having AC as diagonal. Join AO, CO.



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GRADE VIII.

ORTHOEPY AND SPELLING.

PAPER II.

NOTE.—This paper shall be delivered to the candidate after the paragraph and the list of words have been dictated by the presiding examiner.

N.B.—The whole time for the Orthoepy and Spelling shall be one hour.

Values.

- 8 **1.** Explain the meaning of any eight of the following words by reference to the root word, prefix and suffix:
 benefactor, reduction, perimeter, preposition, bisect,
 inaudible, postmortem, equinoctial, tercentenary, sub-
 terranean, transportable, extractor.
- 6 **2.** Divide the following words into syllables and mark the accents:
 armament, irrevocable, vocabulary, compromise,
 perseverance, convalescent.
- 6 **3.** Write in full: K.C., ult., D.C.M., anon., Tp., V.C.



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GRADE VIII.

HISTORY AND CIVICS.

Time—Two hours.

Values.

- 12 **1.** Write definite historical notes on any *four* of the following:
- (a) Jacques Cartier.
 - (b) Maisonneuve.
 - (c) D'Iberville.
 - (d) Adam Daulac.
 - (e) The Jesuit Missions.
 - (f) The Founding of the Hudson's Bay Company.
- 7 **2.** (a) What were the causes of discontent in Upper and Lower Canada which led to the Rebellion of 1837-38?
- 6 (b) What recommendations were made by Lord Durham in his report for the removal of these grievances?
- 9 **3.** Describe the work of any *three* of the following in the building of Canada:
- (a) Wolfe.
 - (b) Sir Guy Carleton.
 - (c) Brock.
 - (d) Sir John A. Macdonald.
 - (e) Sir Wilfred Laurier.
- 6 **4.** (a) Name three sources of revenue for both the Dominion and Provincial Governments.

(OVER)

Values.

- 4 (b) Explain what is meant by each of the following terms used in describing the Government of Canada:

Limited Monarchy, Federal Government, Representative Government and Responsible Government.

- 6 5. Describe briefly the duties and organization of *one* of the following departments of the Provincial Government:

- (a) Department of Education.
- (b) Department of Agriculture.
- (c) Department of Public Works.

OR

Describe briefly the duties and organization of the Council of a Rural Municipality.

- 18 6. Write on any *two* of the following topics:

- (a) Cromwell's Government of England.
- (b) The Revolution of 1688.
- (c) The Repeal of the Corn Laws.
- (d) The Reform Bill of 1832.

- 20 7. Write notes on the work of any *five* of the following:

Wycliffe, Cardinal Wolsey, Queen Elizabeth, John Wilkes, John Bright, Warren Hastings, Gladstone, Lloyd George.

- 12 8. Write on any *two* of the following aspects of the war:

- (a) The part played by the Grand Fleet.
- (b) The Gallipoli campaign.
- (c) Conquest of German colonial empire.
- (d) Value of aeroplanes.



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GRADE VIII.

ORTHOEPY AND SPELLING.

PAPER I.

Time—One hour.

NOTE.—The whole time for Dictation and Orthoepy shall be one hour.

See Foot-note.

Values.

- 20 1. Write the passage dictated by the examiner: New Canadian Reader, Book V, page 314:

“Some lineaments . . . trifling occasion’.”

- 20 2. Write the following list of words dictated by the presiding examiner:

superintendent	surgeon
audacity	influential
grievance	ascertain
premier	agriculture
sergeant	susceptible
financial	furlough
paroxysm	nutritious
business	casualty
allegiance	irresistible
gaiety	civilian

NOTE.—One mark will be deducted for each misspelled word.

Values.

- 2 (c) Measure the angles ADC, ABC, AOC, DAB and DCB.
- 1 (d) What relation exists between angles ADC and AOC?
- 2 (e) State the general truths of which (d) is but the particular case.
- 4 **11.** (a) Describe a regular pentagon in a circle whose diameter is 5 cm.
- 3 (b) Measure one of the angles of this pentagon. Comment upon the measure obtained and show by calculation whether or not your measurement is correct.
- 1 **12.** (a) Draw a triangle ABC with base BC equal to 30 mm. the side AB equal to 18 mm. and side AC equal to 24 mm.
- 3 (b) On another base EF, 40 mm. in length, construct a triangle DEF similar to the triangle ABC.
- 2 (c) What is the condition that these two triangles may be similar?
- 1 (d) Name a pair of corresponding sides.
- 2 (e) How are corresponding sides determined?
- 2 (f) What relation exists between pairs of corresponding sides?



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GRADE IX.

ARITHMETIC AND MENSURATION.

Time—Three hours.

Values.

1. H. O. Peterson of Strome, Alberta, bought a horse for \$135.00 from P. Ryan, also of Strome.
- 5 (a) Supposing payment to be made by cheque, write the cheque.
- 5 (b) Supposing payment to be made by note bearing interest at 10 per cent. per annum and to run for 90 days, write the note.
- 5 (c) Supposing payment to be made in cash and deposited, make out the deposit slip.
- 15 2. Find correct to three places of decimals the square root of $(9\frac{5}{7} + 13.3258)$.
- 20 3. A merchant buys for cash from the wholesale house and receives 10, 7 and 3% off catalog prices. He sells on time at catalog prices and loses 5% of his sales in bad debts. If his expenses for selling amount to 4% of his sales, find his gain per cent.
- 20 4. W. Adams sold for Dr. Farmer an apple orchard in B.C. for \$6,750.00 and received commission 2% and expenses \$75.00. With the proceeds he bought a farm of 320 acres at \$12.00 per acre, receiving 1% commission, and returned the balance to his employer. If the bank charged $\frac{1}{4}$ of 1% exchange, find the amount of cash received by Dr. Farmer.
5. Make the following calculations:
 - 7 (a) The area of a triangle sides 30, 35 and 40 inches.

(OVER)

Values.

- 7 (b) The volume of a cylinder 35 inches long, radius of base 14 inches.
- 6 (c) The area of a trapezium, parallel sides 18 and 29 inches, distance between them 42 inches.
- 20 6. A farmer is ploughing the west half of section 18 and is driving north and south with a two furrow plough each furrow 14 inches wide. He makes on an average 9 rounds each day and works 45 days in June and July. Find his earnings at \$4.00 per acre.

OR

- 20 8. A city block is 500 feet long and 310 feet wide. The street which surrounds the block is 66 feet wide and there is a sidewalk on each side 10 feet wide. Find the cost of paving the street around the block at \$1.25 per square yard.
- 20 9. The reading room of a certain public library is 23.7 m. long, 178 dm. wide and 5.3 m. high. Find the cost of plastering the walls and ceiling at 75c. per centiare.
- 20 10. What will be the cost in insuring property worth \$4,758.00 at the rate of $\frac{7}{8}$ of 1%, so that in case of loss the owner may receive both the value of the property and the premium paid?



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GRADE IX.

BRITISH HISTORY.

Time—Two hours.

Values.

- 12 1. Discuss the influence of *three* of the following in England during the 12th, 13th and 14th centuries:
- (a) The Crusades.
 - (b) The Friars.
 - (c) The Guilds.
 - (d) The Universities.
 - (e) The Lollards.
 - (f) The Peasants' Revolt.
- 16 2. Write an account of the Renaissance in England under the following headings:
- (a) Advance in Learning and Literature.
 - (b) Discovery and exploration.

OR

Discuss the powers of the Sovereign during the Tudor period, indicating the different methods used by the rulers to secure and maintain their power. Give an estimate of how far the personal prestige of the sovereign tended to strengthen the monarchy.

- 15 3. Write definite historical notes on any *three* of the following:
- (a) The Puritans.
 - (b) The Commonwealth.
 - (c) The Revolution of 1688.
 - (d) The Union of England and Scotland.
 - (e) The Religious Revival of Wesley and Whitefield.
 - (f) The Repeal of the Corn Laws.

Values.

12 4. Show the importance of *three* of the following Acts in the development of political and religious freedom in Britain:

- (a) The Bill of Rights.
- (b) Catholic Emancipation.
- (c) The Reform Bill of 1832.
- (d) The House of Lords' Veto Bill.

10 5. Give an account of the work of any *two* of the following:

- (a) King Alfred.
- (b) Henry V.
- (c) Walpole.
- (d) Pitt, Earl of Chatham.
- (e) John Bright.
- (f) Gladstone.

16 6. "From a thinly peopled land of moors, of cornfields and pastures, England was transformed into a thickly peopled manufacturing country—the modern England, with its huge smoky towns, its mines, factories and foundries, and its network of railways and canals. This era is called the period of the Industrial Revolution."

Describe the Industrial Revolution in Britain of the early 19th century, noting the great inventions, rise of industries, and the consequent changes in the social and economic life of the country.

9 7. Write definite notes on the relation of any *three* of the following to the present war:

- (a) National Service in Canada.
- (b) Canada's Military and Financial part in the War.
- (c) The British Blockade.
- (d) The reorganization of the British Government under Lloyd George.
- (e) Germany's Peace Proposals.
- (f) Conscription in Australia.

10 8. Write notes on any *five* of the following, telling who they are and what they have done that has made them prominent in the present war:

- (a) Bethmann-Hollweg.
- (b) Brusiloff.
- (c) Briand.
- (d) Lord Northcliffe.

Values.

(*e*) Hindenburg.

(*f*) Sir Douglas Haig.

(*g*) Venizelos.

(*h*) Nivelle.

(*i*) Sir David Beatty.



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GRADE IX.

GRAMMAR.

Time—Two and one-half hours.

Values.

1. "The farmers *grew impatient*, but a few
Confessed their error and *would not* complain;
For after *all*, the best *thing one* can do
When *it is raining*, is to let it rain.
Then they repealed the law, although they knew
It would not call the dead to life again;
As schoolboys, *finding* their mistake *too late*,
Draw a wet sponge across the *accusing* slate."
- 20 (a) Divide the selection into its component clauses, and tell
the kind and relation of each clause.
- 18 (b) State clearly the function and relation of the italicized
words.
- 15 2. Give the complete analysis of the following sentence:
"Traddles never said who the real offender was, though he
smarted for it next day and was imprisoned so many hours
that he came forth with a whole churchyardful of skeletons
swarming over his Latin dictionary."
- 2 3. (a) What is meant by "old conjugation" and "new con-
jugation"?
- 2 (b) Why are they so called?
- 6 (c) Classify the following verbs as belonging to the old or
to the new conjugation: See, write, walk, find, burn,
take, cost, give, die, plead, hang.
- 4 (d) What name is applied to verbs that lack some of their
principal parts? Give three examples.

(OVER)

Values.

4. Use the following in sentences with as many grammatical values as possible:
- 4 (a) Writing.
 - 2 (b) On the road.
 - 4 (c) Up.
 - 3 (d) Where he lived.
- 10 5. Give five rules for the formation of the plurals of compound nouns, and illustrate by examples.
6. Distinguish the meanings of the following pairs of expressions:
- 2 (a) We saw the poet and statesman.
We saw the poet and the statesman.
 - 2 (b) There is no one that knows it.
There is no one but knows it.
 - 2 (c) The boy fell in the water.
The boy fell into the water.
 - 2 (d) Only his appearance saved the day.
His mere appearance saved the day.
 - 2 (e) Did you see the yellow flower?
Did you see a yellow flower?



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GRADE IX.

HOUSEHOLD ARTS.

(THEORY.)

Time—One and one-half hours.

Values.

- | | | |
|----|----|---|
| 2 | 1. | (a) Of what value to girls is the study of textiles? |
| 10 | | (b) Write a short account of the textile industry as it applies to (1) linen, (2) wool. Explain in each case the source, cultivation, structure and characteristics of fibre and preparation for weaving. |
| 2 | | (c) Name fabrics made from these fibres stating usual widths, prices and articles for which the materials are suitable. |
| 10 | 2 | Explain in detail the cutting and making of a corset cover, with peplum, corset cover to be cut from adapted shirt waist pattern, peplum to be drafted for 26" waist. |
| 6 | 3. | Explain how you would make and attach the following: |
| | | (a) Placket in dress skirt. |
| | | (b) Cuff on shirt sleeve. |
| | | (c) Sailor collar on blouse. |



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GRADE X.

ALGEBRA.

Time—Two and one-half hours.

Values.

- 6 1. (a) Solve the equation:

$$3x - [5 - \{2x + 3(1 - x) + 2\} - 3] = 10.$$

- 7 (b) Without multiplying in full find the coefficient of x the following:

$$(x+2)^2(3x-4) - (5x-6)(1+x)^2.$$

2. (a) Find the value of:

7
$$\frac{1}{a-x} + \frac{1}{x-c} + \frac{4}{c-a}$$

when $x = \frac{2ac}{a+c}.$

- 4 (b) Simplify $\frac{x^3 - ax^2 + b^2x - ab^2}{x^3 - ax^2 - b^2x + ab^2}$

- 3 (c) Divide $\frac{x^3}{2} + \frac{1}{3}ax^2 - \frac{2}{3}a^2x + \frac{1}{6}a^3$ by $\frac{x^2}{2} - \frac{a}{6}$

3. Factor any five of the following:

3 (a) $m^4 + n^4 + mn(m^2 + n^2).$

3 (b) $a^7b - ab^5.$

3 (c) $x^4 + a^2x^2 + a^4.$

3 (d) $a(1 - c^2) - c(1 - a^2).$

3 (e) $x^4 + 2ax^3 + a^2x^2 - b^4.$

3 (f) $s^4 - 3s^2 + 1.$

(OVER)

Values.

4. Attempt *two* parts only:

- 8 (a) Solve for x , y and z :

$$2x - 3y = 4.$$

$$5y - 4z = 6.$$

$$4z - 2x = -6.$$

- 8 (b) Solve for x and y in terms of the other letters:

$$ax + by = c.$$

$$lx + my = n.$$

- 8 (c) Find a fraction such that when the numerator is trebled and the denominator decreased by 4, the value becomes 3, and when the denominator is trebled and the numerator increased by 2 the value becomes $1/5$.

5. Attempt *two* parts only:

- 8 (a) Verify the identity

$$\frac{u^3 - v^3}{u - v} + \frac{u^3 + v^3}{u + v} = \left(\frac{u}{v} + \frac{v}{u} \right) \left(\frac{u^3 - v^3}{u - v} - \frac{u^3 + v^3}{u + v} \right)$$

for the values $u=10$, $v=1$; and for $u=1$, $v=-\frac{1}{2}$.

- 8 (b) A walks x miles in y hours; B walks 1 mile per hour slower than A. How far does B walk in y hours?

- 8 (c) If $v=u+at$ and $v^2=u^2+2as$, find t in terms of v , u and a , s in terms of v , u and a , and s in terms of u , a and t .

- 13 **6.** Between one census and the next the native population of a town increased by 8% , while the number of foreigners decreased from 200 to 150. The increase in the total population was 7% . What was the population at the second census?

- 13 **7.** There are three numbers such that the first with $\frac{1}{3}$ the second is 68; $\frac{1}{2}$ the first with $\frac{2}{3}$ the third is 73; and the second with $\frac{1}{2}$ the third is 90. Find the numbers.



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GRADE X.

GEOMETRY.

Time—Three hours.

NOTE.—Options are given in questions 2 and 7.

Values.

- 8 **1.** Explain clearly each of the following: A straight angle, complementary angles, a segment of a circle, a rhombus, congruence of triangles, median of a triangle, an angle in a segment of a circle, a tangent to a circle.
- 8 **2.** (a) If two triangles have two sides of one equal respectively to two sides of the other, and the included angles equal, the triangles are equal in all respects. (I-6.)
- 6 (b) Assuming that all the angles of a square are right angles, prove that the diagonals are equal and that the point of intersection of the two diagonals is equidistant from the four points of intersection of the sides.

OR

- 8 (a) If one side of a triangle be greater than another side, the angle opposite the greater side is greater than the angle opposite the less. (I-13.)
- 6 (b) ABC is a triangle and the angle A is bisected by AD meeting BC in D. Show that BA is greater than BD and CA greater than CD.
- 3 **3.** (a) Explain briefly the construction required for trisecting a straight line.
- 2 (b) In what quadrilaterals do the diagonals bisect each other?
- 2 (c) In what quadrilaterals do the diagonals bisect opposite angles?

(OVER)

Values.

- 3 (d) For a triangle with base of fixed length, you are given the sum of the sides. When is the area of the triangle a maximum? Give reasons for your answer.
- 9 4. (a) If a straight line falling on two other straight lines make, (1) the alternate angles equal to one another, or (2) the two interior angles on the same side together equal to two right angles, then the two straight lines are parallel. (II-3.)
- 7 (b) ABCD is a parallelogram, and E, F are the bisections of the sides BC, AD. Show that DE, BF trisect the diagonal AC.
- 9 5. (a) Describe a parallelogram equal to a given triangle, and having an angle equal to a given angle. (II-11.)
- 7 (b) Construct a parallelogram equal in area to a given triangle and having the same perimeter as the triangle.
- 3 6. (a) How many circles may be drawn through two given points? How many circles may be drawn through three given points? On what condition may a circle be drawn through four given points?
- 2 (b) How many common tangents may be drawn to two circles that touch (1) internally, (2) externally?
- 3 (c) Find the area of the greatest triangle that may be inscribed in a circle whose radius is 1 inch.
- 3 (d) A triangle ABC has an area of 60 sq. cms. Its perimeter is 30 cm. Find the radius of the inscribed circle.
- 7 7. Find the centre of a given circle. (IV-1.)

OR

Angles in the same segment of a circle are equal. (IV-6.)

- 9 8. (a) On a given straight line construct a segment of a circle, containing an angle equal to a given angle. (IV-14.)
- 9 (b) Construct a triangle having given the base, the vertical angle, and the sum of the remaining sides.



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GRADE X.

BOTANY AND ZOOLOGY.

Time—Two and one-half hours.

NOTE.—Candidates may select either 6 or 7. Candidates shall be expected to obtain pass marks on both parts A and B of this paper.

A.

Values.

- 4 1. (a) Describe experiments to show the importance to the plant in its initial stages of development of food stored in the seed.
- 2 (b) In what parts of the seed of (1) bean, (2) corn, is food stored?
- 2 (c) How would you demonstrate experimentally that seeds produce carbon dioxide freely while germinating?
- 2 2. (a) Demonstrate the following facts by suitable experiments:
- 2 (1) Roots absorb moisture.
- 3 (2) Moisture is transported by roots and stems. What parts of each perform this function?
- 3 (3) Moisture is transpired by leaves. Which side of the leaf transpires more freely?
- 2 (b) State two devices by which leaves prevent too rapid loss of moisture.
- 2 3. (a) Describe the special adaptation and the principal agent employed for seed dissemination in each of the following cases:
- 2 (1) Canadian Thistle or Great Willow Herb.
- 2 (2) Wild Cherry or Wild Rose.
- 2 (3) Tumbling Mustard or Wild Geranium.
- 2 (b) How may the wide dissemination of *either* the Shepherd's Purse or Ball Mustard be accounted for?

(OVER)

Values.

- 4.** Write a note on the dandelion giving:
- 3 (a) The parts of the head.
 - 1 (b) The order in which the florets open.
 - 2 (c) Two advantages of this mode of inflorescence.
 - 2 (d) Mode of protection of the seeds while maturing and preparing for dissemination.
- 5.** Compare two plant societies studied giving:
- 2 (a) The differences in natural conditions, which cause the plant societies to differ.
 - 4 (b) Two leading characteristics in which these plant societies differ showing in each case the relation of adaptation to environment.
 - 3 (c) The names of three plants from each of these societies.
- 6.** Write a note on the Equisetum (Horse-Tail) giving:
- 3 (a) The parts of the plant.
 - 4 (b) The difference in appearance and function between the shoots which appear early in the spring and those that appear later in the season.

OR

- 7.** Write a note on any common Alga (Pond Scum) giving:
- 5 (a) A description of the plant and its mode of reproduction.
 - 2 (b) The difference between it and ordinary land plants in the method of securing nourishment.

50

B.

- 3 **8.** (a) Write a note on the life-history of the House-fly describing each stage through which it passes.
 - 2 (b) State two important points of difference between the larvae of the House-fly and the Mosquito.
 - 2 (c) Compare the wings of the house-fly, grasshopper and butterfly showing in what respects they differ in structure and function.
 - 4 (d) Describe the mouth parts of the grasshopper and butterfly and show how the differences in structure are related to the differences in food habits.
- 4 **9.** (a) Describe the social or community life of any species of bee or ant.
 - 2 (b) Give two advantages of such community life.

Values.

- 2 (c) Name two kinds of beneficial work performed by insects and illustrate your answer by reference to the beneficial work done by any two of the following insects: Bees, lady-bird, silk-worm and dragon-fly.

10. By reference to the mammals of Alberta illustrate the following:

- 2 (a) Adaptation to environment by coloration.

- 2 (b) Nocturnal habits.

- 4 (c) Differences in teeth of carnivorous and herbivorous animals.

- 6 **11.** (a) Describe the beak, feet and wings of either a duck or a hawk and show the relation between the structure of these parts and the habits of the bird selected.

- 2 (b) State two important purposes served by bird migration.

- 6 (c) Write a note on the structure and location of the nests of any three of the following birds: Meadow-Lark, Woodpecker, Hawk, Magpie, Blue-bird, Robin and Blackbird.

12. Write a note on any common fish that you have studied under the following headings:

- 1 (a) External covering.

- 2 (b) Relation of its form to an aquatic habitat.

- 2 (c) Chief organ of locomotion.

- 4 (d) Comparison of the organs of locomotion and respiration of the fish and tadpole.



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GRADE X.

COMPOSITION AND RHETORIC

Time—Two and one-half hours.

Values.

1. "Whoever has made a voyage up the Hudson must remember the Kaatskill mountains. They are a dismembered branch of the great Appalachian family, and are seen away to the west of the river, swelling up to a noble height and lording it over the surrounding country. Every change of season, every change of weather, indeed every hour of the day produces some change in the magical hues and shapes of these mountains, and they are regarded by all the good wives far and near as perfect barometers. When the weather is fair and settled they are clothed in blue and purple and print their bold outlines on the clear evening sky; but sometimes, when the rest of the landscape is cloudless, they will gather a hood of gray vapors about their summits, which, in the last rays of the setting sun, will glow and light up like a crown of glory."
- 15 What is meant by Unity in a paragraph? Coherence? Emphasis?
Show how these qualities have been secured in the foregoing paragraph.
- 20 2. Write a paragraph of 15 or 20 lines descriptive of *one* of the following:
A Storm on the Prairie.
A Prairie Fire.
Morning on the Lake.
A Threshing Scene.
My Birthplace.
- 20 3. Write in good form, an interesting letter of about 15 lines, to a soldier friend in France.
(Candidates will use names and addresses other than their own.)

(OVER)

Values.

70 4. Write a carefully planned composition of about two pages,
on *one* of the following topics:

1. The Dacotah Indians.
2. An Ogallallah Village.
3. Hunting the Buffalo.
4. Tête Rouge, the Volunteer.
5. Henry Chatillon.
6. Wilkins Micawber.
7. At Mr. Pegotty's House in Yarmouth.
8. David Copperfield's escape to his Aunt Betsey.
9. An Amusing Incident in the Story of David Copperfield.
10. Uriah Heep.



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GRADE X.

CANADIAN HISTORY AND CIVICS.

Time—Two hours.

Values.

- 10 **1.** (a) Write an account of the explorations and colonization undertaken by the French in North America prior to 1759, under the following heads:
- (1) Motives for exploration.
 - (2) Explorers.
 - (3) Territory explored.
- 5 (b) Compare briefly the policy of the French and the English in the New World with respect to exploration and colonization.
- 13 **2.** Trace the development of Responsible Government in Canada from 1791 to 1854. Give an estimate of the work of William Lyon Mackenzie, Papineau, Lord Durham, and Lord Elgin in bringing about Responsible Government.
- 13 **3.** Discuss the building of the C.P.R. as a national enterprise, pointing out the concessions made to the company, the value to Canada of the railway in opening up the west, and the efforts of the Company along the lines of immigration and colonization.

OR

Discuss the Tariff Policy of Canada from 1878 to the present. What is meant by a Protective Tariff? Show the relation between this policy of protection and the growth of Canadian industries.

(OVER)

Values.

- 15 4. Write definite historical notes on any *three* of the following:
1. Explorations of Samuel Hearne.
 2. The Red River Settlement.
 3. The Founding of the Hudson's Bay Company.
 4. The Saskatchewan Rebellion.
 5. The Autonomy Bill of 1905.
 6. The Royal North-West Mounted Police.
- 12 5. Discuss carefully any *three* of the following topics:
1. The powers of the Senate in matters of legislation.
 2. The Administration of Postal Affairs in Canada.
 3. The Procedure when a Government Bill is defeated in the House of Commons.
 4. The powers of the province with respect to education.
 5. The organization and duties of the councils of rural municipalities.
- 4 6. (a) The British North America Act fixed the life of a Canadian Parliament at five years. Explain how it has come about that the Parliament which convened after the elections of September, 1911, is still a legally constituted Parliament in 1917.
- 6 (b) Describe the method of appointment, and the duties of the following:
- (a) Governor-General of Canada.
 - (b) Lieutenant Governor of the Province.
- 10 7. Locate and write notes on the present historical importance of any *five* of the following:
1. Dobrudja.
 2. Jutland.
 3. Monastir.
 4. Somme.
 5. Trieste.
 6. Bucharest.
 7. Gorizia.
 8. Verdun.
- 12 8. Write notes on the relation of any *three* of the following to the present war:
- (a) The Political reorganization in Great Britain.
 - (b) Germany's Submarine Warfare.
 - (c) Roumania's part in the War.
 - (d) The establishment of the Kingdom of Poland.
 - (e) The deportation of the Belgians.



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GRADE X.

DRAWING. °

Time—Two hours.

NOTE.—Answer (a) or (b) of questions 1 and 2 and do not put more than the answer to one question on one sheet.

Values.

20 1. (a) (1) Draw an historic ornament pattern or typical detail from memory and indicate the country or the period from which it is taken.

(2) Compare briefly the work of Corot and Turner *or* that of Michelangelo and Raphael.

OR

(b) (1) What is used as a basis of measurement and proportion in the human figure?

(2) Make a sketch of the human figure showing the general proportions.

20 2. (a) Group three letters in a pleasing way, as in a monogram, using Old Roman letters. Render in pen and ink.

OR

(b) Make a pencil layout for a simple poster announcing a ball game. Indicate the necessary lettering, the relative sizes of letters, the spaces between lines of letters and the style of letters to be used. Tell what medium you would use and the size the finished poster would be. It is not necessary to make a complete poster but make all points clear.

20 3. Make a drawing of a chair, table, or box, with special attention to perspective. Render in pen and ink or water color.





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GRADE X.

ENGLISH LITERATURE.

Time—Three hours.

Values.

- 8 1. Give an account of the circumstances responsible for the presence of each of the following in the Forest of Arden: Orlando, Celia, Oliver, Jaques.
- 10 2. Recount the love story of Silvius and Phoebe, and show how this story is used to advance the main plot of the play.

OR

Discuss the following statement, referring to changes brought about in the life and character of persons in the play to illustrate its truth:

“The closer the heart of man comes to the heart of nature the more wholesome his life becomes, is the chief lesson of *As You Like It*.”

3. Jaq. I pr’ythee, pretty youth, let me be better acquainted with thee.
- Ros. They say you are a melancholy fellow.
- Jaq. I am so; I do love it better than laughing.
- Ros. Those that are in extremity of either are abominable fellows, and *betray themselves to every modern censure*, worse than drunkards.
- Jaq. Why, ’tis good to be sad and say nothing.
- Ros. Why, then, ’tis good to be a post.

Values.

Jaq. I have neither the scholar's melancholy; nor the musician's; nor the courtier's; nor the soldier's; nor the lawyer's; nor the lady's; nor the lover's; but it is a melancholy of mine own, compounded of many simples, extracted from many objects, and indeed, *the sundry contemplation of my travels*, in which my often rumination wraps me in a most humorous sadness.

Ros. A traveller! By my faith, you have great reason to be sad; I fear, you have sold your own lands, to see other men's; then *to have seen much, and to have nothing, is to have rich eyes and poor hands.*

Jaq. Yes, I have gained my experience.

Enter Orlando.

Ros. And your experience makes you sad; I had rather have a fool to make me merry, than experience to make me sad; and to travel for it too!

Orl. Good day, and happiness, dear Rosalind!

Jaq. *Nay, then, God be wi' you, an' you talk in blank verse.*

2 (a) Whereabouts in the play does this dialogue occur?

6 (b) Discuss the contrasts in the character of Rosalind and Jaques emphasized here.

2 (c) Mention other characteristics of Jaques.

6 (d) What purposes are served in the play by the introduction of such a character?

4 (e) Write notes on the italicized parts.

15 4. Explain, and give the context (*i.e.* speaker, person spoken to, and circumstances) of *any five* of the following:

(a) "Shall I keep your hogs, and eat husks with them? What prodigal portion have I spent that I should come to such penury?"

(b) "O, how full of briers is this working day world!"

(c) "Sweep on you fat and greasy citizens;
'Tis just the fashion: Wherefore do you look
Upon that poor and broken bankrupt there?"

(d) "And we will mend thy wages: I like this place,
And willingly could waste my time in it."

(e) "Men are April when they woo, December when they wed."

(f) "Your *If* is the only peace maker; much virtue in *If*."

(g) "Now Hercules be thy speed, young man."

5. Quote:

7 (a) Fourteen lines descriptive of the combat between Fitz-James and Roderick.

5 (b) Any ten-line speech of Jaques, Rosalind or Oliver.

THE LADY OF THE LAKE.

- 4 **6.** (a) Name and describe the stanza in which the introduction to each canto is written.
- 4 (b) How does the narrative portion of the poem differ in poetic form from the introductory portion? How in substance?
- 1 (c) What time is occupied by each of the cantos?
7. “*Eager as greyhound on his game,
Fiercely with Roderick grappled Graeme,
‘Perish my name, if aught afford
Its chieftain safety save his sword!’
Thus as they strove their desperate hand
Gripped to the dagger or the brand,
And death had been—but Douglas rose,
And thrust between the struggling foes
His giant strength.*”
- 7 (a) Tell carefully the part of the story to which this extract alludes, making clear the causes of this quarrel.
- 7 (b) Write a sketch of Malcolm Graeme.
- 4 (c) Write notes on the italicized parts.
8. “*As the tall ship, whose lofty prore
Shall never stem the billows more,
Deserted by her gallant band,
Amid the breakers lies astrand;—
So on his couch lay Roderick Dhu!
And oft his fevered limbs he threw
In toss abrupt, as when her sides
Lie rocking in the advancing tides,
That shake her frame with ceaseless beat,
Yet cannot heave her from her seat.*”
- 7 (a) Where is Roderick? Describe his surroundings. Account for his present condition.
- 1 (b) What “figure of speech” runs through this extract?
- 8 (c) Expand this figure so as to bring out the full effectiveness of the comparison. Pay particular attention to the italicized parts.
- 8 **9.** What purposes are served in the story by the death of Blanche of Devan and Red Murdoch respectively?
- 8 **10.** Describe *one* of the following:
 Morning on Loch Katrine.
 The Goblin Cave.
 The Games at Stirling.
 The scene in the Court Room at Stirling.

Values.

8 **11.** (a) Write a sketch of the Spectator's Club and its members.

8 (b) Give Sir Roger's views regarding *one* of the following,
commenting briefly upon his opinions:

True Wisdom, Love, Party Spirit.

10 **12.** Write a careful note on the character of Sir Roger de Coverly
as revealed by his life in the country and his manage-
ment of his estate.



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GRADE X.

GRAMMAR.

Time—Two and one-half hours.

Values.

1. "If, as I take it, you are *marauders seeking gain from belated wayfarers*, it is *but honest to tell you that*, in case of victory, *which is doubtful, seeing you are but two, and Germans at that, there is little to be picked from me, but hard knocks*, or, *given a proper distance, a well-placed shaft, which you would find harder to digest than anything you have taken inwardly this some time past*. I say this but in the way of fair dealing as between man and man, to prevent *after disappointment*, and not as prejudicing a fair encounter, *should your inclination tend in that direction.*"
- 20 (a) Write out in full the clauses of which this passage is composed and tell the kind and relation of each clause.
- 18 (b) State clearly the function and relation of the italicized words.
- 15 2. Give the detailed analysis of the following sentence:
"Once, to be sure, Anteus sat down upon about five thousand of the pygmies, who were assembled at a military review; but this was one of those unlucky accidents for which nobody is to blame; so that the little folks never took it to heart, and only requested the giant to be careful forever afterwards to examine the acre of ground where he intended to squat himself."
- 8 3. Show clearly by means of sentences the correct use of:
 - (a) Compare with, compare to.
 - (b) Call on, call at, call for.
 - (c) Agree to, agree with, agree on.
 - (d) Taste of, taste for.
 - (e) Differ with, differ from.

(OVER)

Values.

(f) Struck by, struck with.

(g) Divide between, divide among.

1 **4.** (a) What is the nature of an infinitive?

3 (b) Name and illustrate the classes of infinitives.

(c) State clearly the function of each infinitive in the following sentences:

1 (1) He came to see the game.

1 (2) The boy desires to improve his handwriting.

1 (3) Have you a house to let?

2 (4) Deceiving others amused him, but he disliked being deceived himself.

2 (5) Be ye quick to hear, slow to speak.

1 (6) They will finish the work to-morrow.

1 (7) He is fond of swimming in the sea.

1 (8) He wants me to do that.

12 **5.** According to the relations in which they stand, adjectives may be classified as: Attributive, Appositive, Predicate, Adverbial Predicate, Objective Predicate, Factive Objective Predicate. Explain each of these relations and illustrate in sentences.

6. Correct the following sentences giving reasons for the changes made:

1 (a) Being a fine day, I went out for a walk.

2 (b) He neither knows French or German.

1 (c) The two last sentences in that paragraph are ambiguous.

3 (d) John can run quicker than Joe, but he is not so good a jumper as him.

2 (e) That is plenty good enough for most anybody.

2 (f) More than one book was laying there when I came in.

1 (g) Whom do you think called to-day?

1 (h) This is hardly the same for you and I.



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GRADE X.

GEOGRAPHY.

Time—Two hours.

Values.

- 2 **1.** (a) Name and describe the movements of the earth.
- 10 (b) Explain the effects of the earth's movements on:
 (1) The distribution of light and heat.
 (2) The circulation of the atmosphere.
- 6 **2.** (a) Give a concise description of the development of a river
 valley from its earliest stages until it arrives at:
 1. Maturity.
 2. Old Age.
 Refer to typical instances.
- 8 (b) Compare the valley of the MacKenzie River with that
 of the St. Lawrence River, with respect to the follow-
 ing:
 1. Area.
 2. Climate.
 3. Possibilities of commercial development.
- 6 **3.** Account for the uneven distribution of rainfall in *one* of the
 following countries: Canada, India, Australia.

OR

- 6 Show, by reference to a typical country, that the physical
 characteristics of a country determine the occupations
 of its inhabitants.
- 4.** Examine the following extracts from an Albertan farmer's
 weather diary:

(OVER)

Values.

- 3 (a) "July 12: 7 a.m., a beautiful bright morning, but the air seems heavy. Temperature 2 p.m., 86°. A heavy thunder-storm came up at 4 p.m." Account for the thunder-storm.
- 3 (b) "Aug. 17: 7 a.m., rather cooler than yesterday morning. Temperature at 8 p.m. 39°. Sky clear of clouds. No wind."
"Aug. 18: The first frost of the season. Much damage to crops."
Account for the frost.
- 12 5. Give an account of the Glacial period, with special reference to Canada, under the following heads:
- (a) Relative time in the earth's history.
 - (b) Area affected by the ice-field.
 - (c) Modifications of land surface resulting from the ice invasion.
 - (d) Benefits of glacial action to Canada.
- 14 6. "Canada has possibilities of great commercial expansion."
Discuss this statement from the following stand-points:
- (a) Geographical position with respect to the world's great markets.
 - (b) Natural resources.
 - (c) Sources of power for manufacturing purposes.
 - (d) Transportation and harbor facilities.
- 14 7. "Trade within the British Empire itself naturally follows certain routes."
- (a) Indicate, briefly, three of these great trade routes.
 - (b) Carefully describe a trade route leading to Eastern markets, mentioning the naval bases, coaling stations, and dry docks available for vessels taking it.
 - (c) What British exports would probably be found in the cargo of a vessel clearing from Liverpool for a terminal port in one of the British Overseas Dominions?
 - (d) What British imports would probably make up the return cargo?
- 5 8. What influences have been instrumental in bringing into existence *any two* of the following great commercial centres: Winnipeg, New York, London, Hamburg?
- 5 9. Show clearly the importance of *any two* of the following British possessions, from the standpoint of defence of British interests: Falkland Islands, Malta, Singapore, Aden, Victoria (Hong Kong).

Values.

12 **10.** Compare the British Isles and Japan, under the following heads:

(*a*) Geographical position.

(*b*) Resources.

(*c*) Government.



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GRADE X.

HOUSEHOLD SCIENCE.

(THEORY)

Time—One and one-half hours.

Values.

- | | |
|---|--|
| 2 | 1. (a) What do you consider essential points to be observed in planning the family dietary? |
| 8 | (b) Plan a day's dietary for a family consisting of two adults and two children aged ten and twelve. State present prices of food indicated, and estimate approximately the cost of each meal for the day. |
| 5 | 2. (a) Give the percentage composition of milk. Explain the clotting of milk as it occurs in (1) making junket, (2) souring of milk. |
| 2 | (b) Write clearly stating what precautions are to be observed in procuring a clean milk supply. |
| 4 | 3. Describe one method of making bread, giving your reasons for each step in the process. |
| 3 | 4. What are our chief sources of (1) protein, (2) fat, (3) starch? |
| 6 | 5. Write brief notes on the following as applied to foods and cookery: Gluten, dextrin, yeast, pasteurization, calorie, pectin. |



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GRADE X.

MANUAL ARTS.

(THEORY)

Time—One and one-half hours.

NOTE.—*In question 5, answer either (a) or (b), but not both.*

Values.

- 6 1. Describe the method of starting a blacksmith's fire and how to keep it hot and clean.
- 6 2. Name and describe or sketch six typical blacksmith's tools, implements or accessories.
- 6 3. What are the principal differences between iron and steel? Name two things which must be made from steel, two which are usually made from iron and two which may be made from either iron or steel.
- 6 4. What do you understand by: *Annealing, welding, upsetting, drawing-out, brazing, seaming.*
- 6 5. (a) Describe the several steps you would take in forging an S hook, a staple or other similar piece of a given size and shape.

OR

- (b) Describe how you would make a cylinder of sheet iron (similar to a length of stove pipe).



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GRADE XI.

GEOMETRY.

Time—Three hours.

Values.

- 10 **1.** (a) If two triangles have two sides of the one equal to two sides of the other, each to each, but the angle contained by the two sides of the one greater than the angle contained by the two sides of the other; then the base of that which has the greater angle is greater than the base of the other. (I-16.)
- 7 (b) ABC is a triangle having AB less than AC and P is any point in the line joining A to the middle point of BC. Show that P is nearer to B than to C.
- 8 **2.** (a) Straight lines which join the extremities of equal and parallel straight lines towards the same parts, are themselves equal and parallel. (II-4.)
- 8 (b) Through a given point D within the angle BAC draw a straight line BDC such that BD is equal to DC.
- 10 **3.** (a) If a straight line be drawn parallel to one side of a triangle, it cuts the other sides proportionately. And conversely, if a straight line cut two sides of a triangle proportionately, it is parallel to the third side. (III-2.)
- 8 (b) The straight line joining the middle points of the sides of a triangle is parallel to the base, and is one-half the base.

OR

- 12 (a) If the vertical angle of a triangle be bisected by a straight line which also cuts the base or the base produced, the segments of the base have the same ratio which the other sides of the triangle have to one another. (III-3 and 4.)

Values.

- 6 (b) A point D is taken in BC, a side of the triangle ABC, and the angles ADB, ADC are bisected by DE, DF meeting AB, AC in E and F, respectively. If EF be parallel to BC show that D must be the bisection of BC.
- 10 4. Divide a given straight line similarly to a given divided straight line. (III-9.)
- 8 5. Prove that the areas of similar triangles have the same ratio as the squares of—
- (a) Corresponding altitudes.
- (b) Corresponding medians.
- (c) The radii of their inscribed circles.
- 10 6. (a) If two chords of a circle intersect, either within or without the circle, the rectangle contained by the segments of one is equal to the rectangle contained by the segments of the other; and if the point of intersection be without the circle, the rectangle contained by the segments of a chord is equal to the square on the tangent from that point. (IV-20.)
- 7 (b) If two circles intersect and through a point on their common chord, two secants are drawn, one to each circle; show that the four points of section of the secants with the circles are concyclic.
- 9 7. (a) The areas of similar polygons are as the squares on corresponding sides. (V-3.)
- 4 (b) Two similar polygons being given, construct a similar polygon equal to their sum.
- 5 (c) The triangle ABC has AB divided into four equal parts and through the three points of division, lines are drawn parallel to BC. Compare the areas contained between successive parallels.
- 11 8. Construct a rectilinear figure similar to a given rectilinear figure; and such that the areas of the figures shall be in a given ratio. (V-5.)
- 2 9. (a) Two triangles are similar. The perimeter of one is twice that of the other. Compare their areas.
- 2 (b) Represent graphically the following proposition: "If a straight line be divided into two equal parts, and also into two unequal parts, the rectangle contained by the unequal parts, together with the square on the line between the points of sections, is equal to the square on half the line."

Values.

- 2 (c) When are two rectilineal figures similar?
- 2 (d) When is a straight line said to touch a circle?
- 2 (e) State the converse of the following proposition: "Angles
in the same segment of a circle are equal."



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GRADE X.

PHYSICAL SCIENCE.

Time—Two and one-half hours.

Values.

- 4 **1.** (a) How would you determine experimentally the centre of gravity of a flat triangular body, the sides of the triangle being of unequal lengths?
- 4 (b) The length of a lever of the first class is 4 feet. Where must the fulcrum be placed so that a body weighing 80 pounds may be raised by applying a force of 16 pounds?
- 2 **2.** (a) State Pascal's principle.
- 5 (b) Describe, using a diagram, a hydraulic press and show how Pascal's principle is applied in its operation.
- 8 (c) Describe experiments to show that the pressure at a point in a liquid is dependent upon the depth of the point in the liquid and is independent of the shape of the containing vessel or of the quantity of liquid.
- 4 **3.** (a) Describe a simple laboratory experiment for determining the rate of pressure of the atmosphere.
- 4 (b) Explain the principle of the aneroid barometer and give two important uses which it may serve.
- 4 (c) A given mass of gas occupies a volume of 60 litres when the rate of pressure is equal to that of a column of mercury 80 cm. high. What volume will it occupy when the rate of pressure is equal to that of a mercury column 120 cm. high?
- 5 **4.** (a) Define or write explanatory notes on the following terms: Energy, mechanical advantage, buoyancy, capillarity and osmosis.
- 2 (b) Why does Hydrogen pass more rapidly than air through a porous membrane?

(OVER)

Values.

- 2 (c) Why do soap bubbles or drops of water assume a globular form?
- 4 **5.** (a) Describe an experiment to show at what temperature water attains its maximum density.
- 2 (b) Why is the fact demonstrated in (a) of importance in nature?
- 4 (c) What readings on the Centigrade scale correspond to the following readings on the Fahrenheit scale: 122° , -40° ?
- 5 **6.** (a) How may the heat of fusion of ice be determined experimentally?
- 4 (b) What are the effects of solids in solution and the rate of pressure on (1) the freezing point, (2) the boiling point of water?
- 4 (c) A cylinder of brass, the mass of which is 200 grams is heated in a vessel containing water boiling at 100° C. It is taken from the vessel and placed on a block of ice at 0° C. If the specific heat of brass is 0.09, what mass of ice will be melted?
- 4 **7.** (a) Describe an experiment to show the conditions under which convection currents may be produced in liquids and explain their production under these conditions.
- 5 (b) Describe the construction of and show how a knowledge of heat conduction is practically applied in one of the following:
 Davy's safety lamp, refrigerator, ice cream freezer.
- (c) Explain the following phenomena:
- 2 (1) A cool glass pitcher cracks when boiling water is poured into it.
- 2 (2) Moisture appears on the surface of a pitcher containing cold water when placed in a warm room.
- 4 **8.** (a) Describe an experiment to show the presence and direction of the lines of force in the magnetic field of a bar magnet.
- 4 (b) How may the magnetic inclination at any place be determined experimentally?
- 2 (c) Why do the iron parts of a school desk become magnetized?
- 6 **9.** (a) Describe any common voltaic cell, telling the parts of which it is composed, and showing by diagram the relation of the parts and the connections necessary to produce an electric current.

Values.

- 4 (b) Give a description of the apparatus necessary to demonstrate the use of an electric current in Electro-plating.

OR

- 6 10. (a) State the function of the field magnets, armature and commutator of a direct current dynamo.
- 2 (b) What transformation of energy takes place when a dynamo is being operated?
- 2 (c) In what respects does a direct current dynamo differ from an alternating current dynamo?



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GRADE XI.

CHEMISTRY.

Time—Two and one-half hours.

Values.

1. Describe an experiment to illustrate each of the following:
 - 3 (a) The production of heat due to chemical action.
 - 3 (b) That heat may cause a chemical change which will continue on account of the heat developed by the chemical action.
 - 3 (c) That an electric current will cause chemical change.
 - 3 (d) That chemical action will produce an electric current.
 - 3 (e) That simple contact of substances often results in a chemical change.
2. State and explain clearly what you might observe in each of the following experiments:
 - 4 (a) A piece of platinum wire of known weight is heated for a few minutes in the flame of a Bunsen burner or spirit lamp and is allowed to cool and is then reweighed.
 - 6 (b) A piece of pure zinc is placed in a test tube and covered with dilute hydrochloric acid. A lighted taper is applied to the mouth of the tube. The experiment is repeated using a piece of pure zinc around which platinum wire is closely wrapped.
 - 4 (c) Potassium chlorate and manganese dioxide are heated together in a flask and a glowing splinter held in the mouth of the flask.
 - 6 (d) A piece of clean sodium is placed in a combustion cup and lowered into a jar of oxygen gas; after action ceases water is added to the jar which is then well shaken. The contents of the jar are tested with red and blue litmus paper. What kind of a substance is in the water?

Values.

- 6 **3.** (a) Describe a suitable laboratory experiment to show that
 when iron burns the substance formed weighs more
 than the iron which was burned.
- 2 (b) How do you account for the increase in weight?
- 8 (c) What volume of hydrogen measured at standard tem-
 perature and pressure is formed when 223.6 grams of
 pure iron filings are completely oxidized by passing
 steam over it in a heated combustion tube? Fe.=55.9.
- 9 **4.** (a) Accurately describe a laboratory experiment to show the
 proportion in which oxygen and hydrogen combine to
 form water.
- 2 (b) Make a neat drawing of the apparatus used in (a).
- 6 **5.** (a) Write an equation to represent the change which takes
 place in each of the following:
- (1) When lime slakes.
- (2) When mortar sets.
- (3) When carbon disulphide burns.
- (b) In the preparation of carbon monoxide from oxalic acid
 and sulphuric acid—
- 2 (1) Why do you wash the gases given off?
- 2 (2) What substance do you put into the wash
 bottle?
- 2 (c) Explain the conditions under which carbon monoxide may
1 be formed in an ordinary coal range. By what evidence
 might you detect the presence of this gas in a range?
- 9 **6.** Illustrate three important properties of chlorine by one
 experiment for each property.
- 9 **7.** (a) How many grams of 20% hydrochloric acid are necessary
 when passed into caustic potash solution to form 150
 grams of potassium chloride?
 H=1; Cl=35.5; K=39.1; O=16.
- 4 (b) Describe an experiment to illustrate the most important
 property of nitrates.
- 4 (c) By what chemical test could you distinguish a soluble
 chloride from a nitrate?
- 3 **8.** (a) You are given four salts and told they are (1) a carbonate,
3 (2) a sulphide, (3) a sulphate, (4) a chlorate and you
3 are required to apply tests that will distinguish each
3 salt. How would you proceed to prove conclusively
3 by a definite chemical test for each that you can dis-
 tinguish them?

Values.

(b) Write concise notes on the commercial value and use made of each of the following:

3

(1) Nitrates.

3

(2) Chlorine.

3

(3) Sulphuric acid.

3

(4) Lime.

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GRADE XI.

GERMAN AUTHORS.

Time—Two and one-half hours.

NOTE.—The passages set in this paper should be rendered into idiomatic English, that is to say, English which accords with good usage in the choice of words, phrases, and sentence structure. Avoid mere transliteration. Remember that the involved German style can seldom be imitated in English, and do not hesitate to “break up” involved sentences into simpler forms. The translation should, however, reproduce the meaning exactly.

Values.

25 1. (a) Translate into English:

Mit Herzklopfen und bangen Ahnungen war er die kauzleirätliche Treppe *hinaufgestiegen* und mit freudestrahlendem Gesicht kam er wieder *herunter*. Seine Befürchtungen hatten sich als unbegründet *erwiesen*; die Kanzleirätin hatte, ein paar dicke Tränen *vergieszend*, ihr schönes Kind in die Arme des glücklichen Doktors geführt, und der Känzleirat hatte vor Rührung kaum seinen Segen *sprechen* können. Freilich, wenn der freudetrunkene Braütigam gehört hätte, mit welchen Worten die Kanzleirätin das Zwiegespräch beendigte, welches sie nach des Doktors Entfernung mit ihrem Theodor *hielt*, so würde seine Freude einigermaszen getrübt worden sein. Sie hatte nämlich gesagt: “Ein Sperling in der Hand ist besser als eine Taube auf dem Dach,” und nicht undeutlich zu *verstehen* gegeben, dasz sie mit dem Sperling den Doktor Eckart, mit der Taube aber den Grafen Esanady meine.

Dasz im Eckartschen Hause alles in Freude *schwamm*, versteht sich von selbst. Die Mutter begann alsbald ein gewaltiges Rumoren in allen Räumlichkeiten. Die alten Nuszbaumschränke wurden geöffnet und eine Generalmusterung über Leinen, Tischzeug und dergleichen in einem Haushalte unentbehrlichen Dinge gehalten. Auch konnte man das Elternpaar sehen, wie es die Räume zwischen den Fenstern masz, um die Grösze der hier *anzubringenden* Spiegeln zu bestimmen.

Values.

- 15 (b) Inflect the verbs italicized in the foregoing passage in the third person singular of the present, imperfect, and perfect indicative, active voice.
- 10 (c) Write with the definite articles the genitive singular and nominative plural of the following nouns occurring in the foregoing passage:

Treppe, Befürchtung, Dach, Bräutigam, Fenster, Spiegel, Zwiegespräch, Kanzleirat, Doktor, Wort.

- 15 2. (a) Translate into English:

“Ich habe dir’s wohl angesehen, Heinrich,” sagte seine Frau.

“Ich bin ein Mann, ich kann mich beherrschen,” erwiderte der Alte. “Aber ich sage dir das eine: auf den Händen möchte ich meinen Sohn tragen, der seines Vaters wegen auf sein Glück verzichtet hat. Wie er auftrat und den ungarischen Grafen zurechtwies, und wie er nachher an unserem Arm dem Hause, wo man seinen Vater gekränkt hatte, den Rücken kehrte, das werde ich ihm nie vergessen, und noch auf meinem Sterbebette soll mir diese Erinnerung ein Labsal sein.—Ich habe mich zu trösten versucht, ich habe gedacht, das Mädchen war ihm nicht bestimmt, er wird sie vergessen und sie ihn.—Nun kommst du mir mit deiner Entdeckung, und die wirft alle meine Berechnungen über den Haufen.—Die Sache will freilich überlegt sein. Wenn sie sich trotz des Vorgefallenen treu und ehrlich lieben, so ist auch das Spiel noch nicht verloren. Was ich tun kann, das soll geschehen, ausgenommen bleibt natürlich eine Demütigung von unserer Seite. Kopf oben, Frau!”

- 5 (b) Outline briefly the substance of the story from which the foregoing passage is taken.

- 30 3. Translate, at sight, into English:

Vor Jahren, als Albrecht I, von Österreich die Schweizer zu seinen Untertanen machen wollte, befahl er seinen zwei Landvogten, Geszler und Landenberg, die Einwohner der drei Landschaften* Schwyz, Uri und Unterwalden so lange zu plagen, bis sie sich willig zeigen würden, ihm Pflicht und Treue zu schwören. Denn die Schweizer waren freie Leute, stolz auf ihre Freiheit, und nur dem Deutschen Reiche, nicht aber dem Hause Österreich verpflichtet. Um nun ihren Stolz zu brechen und ihren Freiheitssinn zu schwächen, lieszen die zwei Vögte Festen im Lande erbauen, worin sie jeden, der auch das geringste Vergehen beginge, einzusperren drohten. Damit nicht zufrieden suchte Geszler nach einem Vorwande†, die Besten des Volks ins Gefängnis zu werfen, und zu diesem Ende befahl er, dasz jeder, der an einer auf dem Marktplatze von Altorf aufgerichteten Stange vorbeiginge, ohne sich vor dem an der Stange befestigten Herzogshut Österreichs zu verbeugen, als Reichsverräter‡ behandelt werden sollte.

Nun war aber unter den Schweizern ein freier Mann, namens Tell, der als trefflicher Schütze weit und breit bekannt war und den Geszler wegen seiner Freiheitsliebe und seines offenen Wesens ganz besonders haszte. Eines Tages kam dieser Tell mit seinem Söhnchen nach Altorf und da er sich, als er an der Stange vorbeiging, nicht vorbeugen wollte, ergriff Geszler die Gelegenheit, seinen Hasz gegen ihn aufs grausamste zu beweisen. Er befahl nämlich, dasz Tell auf hundert Schritte einen Apfel seinem Söhnchen vom Kopfe wegschieszen und, falls er fehlschösse, seinen eignen Kopf verlieren solle, Obgleich Tell über den unerhörten Befehl äusserst bestürzt war, so glückte es ihm doch, in folge der Zuversicht** seines braven Söhnleins, den Apfel beim ersten Schusse zu durchbohren. Nichtsdestoweniger liesz Geszler ihn verhaften. Aber Tell wuszte sich zu befreien, und nachdem er den Geszler getötet, half er seinen Landsleuten, sich aus der Macht der Vögte befreien. Seitdem sind die Schweizer ein freies Volk geblieben, und Wilhelm Tell ist zu ihrem Nationalhelden geworden.

*canton.

†pretext, excuse.

‡traitor to the Empire.

**confidence.



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GRADE XI.

HISTORY.

Time—Two and one-half hours.

Values.

- 6 1. (a) Give an account of the constitutional development of Athens before the Persian Wars.
- 6 (b) Show how the Persian Wars gave rise to the Athenian Empire.
- 6 (c) Give an account of the fall of the Athenian Empire.

OR

Draw a map of Greece and describe the land and the people pointing out the influence of nature and of race upon Greek history.

- 13 2. Discuss: "During this time (the last century of the Roman Republic) many agencies were at work undermining the institutions of the Republic and paving the way for the Empire."—*Myers*.
- 10 3. Compare the political constitution of the Empire under Augustus with that of the Empire under Diocletian.

OR

Discuss: "Embracing in a single view all the countries included in the Roman Empire, the second century of the Christian era marks the happiest period in their history."—*Myers*.

- 10 4. Outline the rise of the barbarian Kingdoms existing in the ancient world about 500 A.D.

(OVER)

Values.

5. "The Mediaeval period was the most religious period in European history." Discuss this statement under the following heads:
- 4 (1) Religious Orders.
 - 4 (2) The Papacy.
 - 4 (3) The Crusades.
- 16 6. Outline the constitutional development of Canada from the coming of the United Empire Loyalists to the Quebec Convention of 1864.
- 15 7. Compare the position and powers of the King, the Governor-General and the Lieutenant Governors.

OR

- 7 (1) Explain fully: "The law regulates the division of the powers of government into what are known as the executive, legislative and judicial departments."—*Bourinot*.
- 8 (2) How are these functions exercised by the Federal Government of Canada?
- 3 8. (1) What constitutes the Parliament of Canada?
- 3 (2) Who are represented there?
- 9 (3) How are these representatives chosen?
- 16 9. Outline the educational system of Alberta.

OR

Discuss the judicial system in the Province of Alberta under the following heads:

- 6 (1) The courts and their constitution.
- 4 (2) The trial of civil actions.
- 6 (3) The trial of criminal offences.



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GRADE XI.

LATIN GRAMMAR AND COMPOSITION.

Time—Two and one-half hours.

Values.

1. (a) Decline in combination throughout both numbers the following phrases:
- 4 *eadem mulier;*
6 *id vetus templum.*
- 4 (b) Write the following forms:
 gen. pl. of *urbs*, dat. sing. of *currus*,
 acc. sing. of *spes*, abl. sing. of *mare*.
- 10 2. (a) Give the other degrees of comparison for the following adjectives and adverbs:
 fortius (advb.), *audacter*, *melior*, *dui*, *pessime*, *facilior*,
 supremus, *inferior*, *parum*, *acrior*.
- 4 (b) Give the declension, singular and plural, for the comparative adjective *nobilior*.
- 15 3. (a) Parse fully the following verb forms (*i.e.*, give Mood, Voice, Tense, Person, Number, and the principal parts of the verb involved):
 dimitterent, *subsequi*, *videbatur*, *consuevit*, *gerantur*.
- 10 (b) Write the following forms:
 The Gerundive (in the nominative) of *audio*.
 The Gerund (in the ablative) of *sequor*.
 The Present Participle (nominative) of *gero*.
 The Subjunctive Passive Pluperfect 1st plural of *dimitto*.
 The Infinitive Perfect of *possum*.

(OVER)

Values.

4. Write the Latin for:

- 5 (a) All these things; to march; with the greatest zeal; of all
 Britain; on account of the time of year.
- 6 (b) To prolong the affair into the winter; some from one
 ship, some from another; for the purpose of securing
 ships.

5. Translate into Latin:

- 6 (a) He hoped that there would be no uprising in Gaul before
 he returned from Britain.
- 6 (b) I am afraid that our troops cannot longer withstand the
 onset of the enemy.
- 6 (c) The general warned his men not to despise (*contemno*)
 the enemy whose courage had often been shown before
 on the battle-field.
- 6 (d) The barbarians, learning the Roman plan and sending
 cavalry ahead, prevented our men from disembarking.
- 6 (e) When they realized that there was no chance of escape,
 they decided to fortify their position by felling (*succido*)
 trees.
- 6 (f) If he were to ask me to come, I should refuse.

5. Translate into English at sight:

33

Caesar in Illyria, fighting against Pompey, feels the lack of reinforcements from Italy.

Multi iam menses erant et hiems praecipitaverat, neque Brundisio naves legionesque ad Caesarem veniebant. Ac nonnullae eius rei occasiones praetermissae Caesari videbantur, quod cercii saepe flaverant venti, quibus necessario committendum existimabat. Quantoque amplius processerat temporis, tanto erant alacriores ad custodias ei qui classibus Pompeianis praeerant maioremque fiduciam prohibendi habebant, et crebris Pompei litteris castigabantur, ut, quoniam primo venientem Caesarem non prohibuissent, reliquos eius exercitus impedirent. Quibus rebus commotus Caesar Brundisium ad suos severius scripsit, nacti idoneum ventum ne occasionem navigandi dimitterent, sive ad litora Apolloniaticum sive ad Labeaticum cursum dirigere atque eo naves eicere possent.

Cercii venti—south-west winds. *Castigo*—to remind sternly.

Naves eicere—to run ships ashore.

The *Apolloniatas* and the *Labeates* were coast peoples of Illyria.



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GRADE XI.

LATIN AUTHORS AND SIGHT TRANSLATION.

Time—Two and one-half hours.

Values.

1. Translate into English:

- 12 "*Erat ob has causas summa difficultas, quod naves propter magnitudinem nisi in alto constitui non poterant; militibus autem, ignotis locis, impeditis manibus, magno et gravi armorum onere oppressis, simul et de navibus desiliendum et in fluctibus consistendum et cum hostibus erat pugnandum; cum illi aut ex arido aut paululum in aquam progressi, omnibus membris expeditis, notissimis locis, audacter tela conjicerent, et equos insuefactos incitarent. Quibus rebus nostri perterriti, atque hujus omnino generis pugnae imperiti, non eadem alacritate ac studio, quo in pedestribus uti proeliis consueverant, utebantur.*"
- 3 (a) *Magno et gravi onere armorum*—Mention the principal items in the offensive and defensive equipment of the Roman legionary soldier.
- 2 (b) *Huius omnino generis pugnae imperiti*—What inference do you draw from this statement and related passages in the portion of the *Bellum Gallicum* you have read as to the military weaknesses of the Roman legions?
- 2 (c) *Equos insuefactos*—From your memory of another chapter in Book IV give an account of the training of horses by the Britons.

2. Translate into English:

- 10 "*Tum rursus aestus commutationem secutus, remis contendit, ut eam partem insulae caperet, qua optimum esse egressum superiore aestate cognoverat. Qua in re admodum fuit militum virtus laudanda, qui vectoriis gravibusque navigiis, non intermisso remigandi labore, longarum navium cursum adaequarunt. Accessum est ad Britanniam omnibus navibus meridiano fere tempore,*

neque in eo loco hostis est visus: sed, ut postea Caesar ex captivis cognovit, cum magnae manus eo convenissent, multitudine navium perterritae, quae cum annotinis privatisque, quas sui quisque commodi fecerat, amplius octingentae uno erant visae tempore, a litore discesserant ac se in superiora loca abdiderant."

- 6 (a) What has Caesar to tell us about the following:
1. Woods and metals found in Britain;
 2. Investigations on the length of the nights in Britain;
 3. Personal appearance of the Britons?
3. Translate into English:
- 12 Tum vero tremefacta novus per pectora cunctis
insinuat pavor, et scelus expendisse merentem
Laocoonta ferunt, sacrum qui cuspidē robur
laeserit et tergo sceleratam intorserit hastam.
Ducendum ad sedes simulacrum orandaque divae
numina conclamant.
Dividimus muros et moenia pandimus urbis.
Accingunt omnes operi pedibusque rotarum
subiciunt lapsus et stuppea vincula collo
intendunt. Scandit fatalis machina muros
feta armis. Pueri circum innuptaeque puellae
sacra canunt funemque manu contingere gaudent;
illa subit mediaeque minans inlabitur urbi.
- 2 (a) The metre of the Aeneid is Dactylic Hexameter. Explain
the force of each of these names. Write a note on the
1 sixth verse which does not conform to the general
versification scheme.
- 2 (b) Scan completely (marking quantities, ends of feet, and
caesura) the first verse of above quotation.
- 2 (c) What was the story by which Sinon persuaded the Trojans
to draw the wooden horse within the city?

4. Translate into English:

- 8 Atque hic successu exsultans animisque Coroebus
'O socii, qua prima,' inquit, 'fortuna salutis
monstrat iter quaque ostendit se dextra, sequamur;
mutemus clipeos Danaumque insignia nobis
aptemus. Dolus an virtus, quis in hoste requirat?
arma dabunt ipsi.' Sic fatus deinde comantem
Androgei galeam clipeique insigne decorum
induitur laterique Argivum accommodat ensem.
- 2 (a) Under what circumstances and by whom is the story
of Aeneid II supposed to be told?
- 3 (b) Who is the speaker in the case of each of the following
lines?
1. *Quidquid id est, timeo Danaos et dona ferentes.*
 2. *Eripui (fateor) me leto et vincula rupi.*
 3. *Venit summa dies et ineluctabile tempus.*



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GRADE XI.

PHYSICAL SCIENCE.

Time—Two and one-half hours.

Values.

- | | | |
|---|---------|---|
| 2 | 1. (a) | Describe fully the motion of the molecules as a wave moves along the surface of a body of water. |
| 2 | (b) | Compare with this the motion of the molecules of air as a sound wave passes through it. |
| 5 | (c) | Define wave length. Describe an experimental method of determining the wave length of a note produced by a tuning-fork. |
| 4 | (d) | Explain the phenomenon of beats and show why beats caused by two tuning forks, the vibration-frequencies of which are nearly equal, are more readily distinguishable than the beats caused by two tuning forks, the vibration-frequencies of which differ widely. |
| 6 | 2. (a) | How may the pitch of a note be determined experimentally? |
| 2 | (b) (1) | Why are the notes of equal pitch and intensity produced by a violin and a piano readily distinguishable? |
| 2 | (2) | How may the quality of a note produced by an organ pipe be varied? |
| 8 | (c) | Describe the manometric flame apparatus and explain its use in analyzing complex sounds and overtones. |
| 2 | 3. (a) | Define umbra and penumbra. |
| 4 | (b) | Explain, using a diagram, the conditions under which there may be a total eclipse of the moon. |
| 4 | (c) | Describe an experiment to demonstrate the Law of Inverse Squares. |

Values.

- 4 **4.** (a) (1) Two mirrors A and B are placed parallel to one another and an object is placed between them nearer to A than B. Show by means of a diagram the positions of the first four images seen on looking into mirror A.
- 2 (2) Account for the formation of so many images with parallel mirrors.
- (b) An object is moved from a point beyond the centre of curvature of a concave mirror to a point less than the focal length from the mirror.
- 3 (1) When will the magnitude of the image be smaller than, equal to, and greater than the object?
- 2 (2) When will the image be (a) real, (b) virtual?
- 4 (c) An object is placed at a point more than twice the focal length from a convex lens. By means of a drawing show the position and relative magnitude of the image.
- 4 **5.** (a) A line is drawn on a paper and a piece of plate glass is placed over a part of it. Why does the part beneath the glass appear to be raised?
- 4 (b) (1) Describe an experiment to show how a spectrum may be obtained.
- 2 (2) Account for the dispersion of light in (1).
- 4 (c) Given a Newton's disc and whirling machine, what simple device could one use to determine what pairs of colors are complementary?
- 4 **6.** (a) Describe experiments to prove that the earth exhibits polarity and that it possesses a magnetic field.
- 5 (b) Define Magnetic Declination and show how it may be determined experimentally.
- 8 **7.** (a) Describe the construction and action of any common storage battery.
- 2 (b) State two economic uses made of it.
- 4 (c) Show how the chemical effects of the electric current may be used in determining the current strength.
- 8.** (a) Discuss the relation between electricity and magnetism showing that—
- 4 (1) A magnetic field surrounds a conductor through which a current is passing.
- 4 (2) A permanent or electro-magnet may be used in producing an electric current.
- 4 (b) Give two important economic applications of each of the above points.

Values.

- 8 **9.** (a) Describe fully the construction and action of the Induction Coil.
- 4 (b) Why did the perfection of this coil necessarily precede the discovery and use of wireless telegraphy and Rontgen Rays?
- 8 **10.** Describe the construction and action of either an electric motor or an electrical condenser.



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GRADE XI.

ALGEBRA.

Time—Three hours.

Values.

- 7 1. (a) If $\frac{y}{x} + 6y = 7$, express y in terms of x , also x in terms of y .
How may these results be checked?

- 8 (b) Simplify:

$$\frac{\frac{y^3+x^3}{y-\frac{x}{1+\frac{x}{y-x}}}}{\frac{y^3-x^3}{y+\frac{x}{1-\frac{x}{y+x}}}}$$

- 8 2. (a) Find the value of $\left(\frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}\right)^2 + \left(\frac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}\right)^2$

- 8 (b) Find the value of $(ab)^0 + ab^0 - a^{-1}b^1$ when $a=0.125$ and $b=16$.

3. Factor any *three* of the following:

5 (a) $a^5 + 64a$.

5 (b) $64 - x^{12}$.

5 (c) $ax^2 + bx + c$.

5 (d) $36u^2 - 69uv - 35v^2$.

- 8 4. (a) Find the sum of the squares of the roots of the equation $2x^2 + 3x + 4 = 0$.

- 8 (b) Solve, by "completing the square," or by drawing a graph, the equation $2x^2 + 5x = 3$.

(OVER)

Values.

- 7 (c) If $\frac{1}{2}(1+\sqrt{3})$ is one root of $2x^2-nx-1=0$, find the other root. Find the value of n .

5. Solve any *two* of the following. In each case verify your result.

10 (a) $4xy=96-x^2y^2$; $x+y=6$.

10 (b) $(x-1)(x^{3/2}-2x^{5/4}-x)=x-x^2$.

10 (c) $x^2+y^2=x+y+2$; $xy=x+y-1$.

- 9 6. The following table shows the "expectation of life" for ages between 10 and 50.

Age in years.....	10	15	20	25	30	40	50
Expectation of life...	49.6	45.2	41	37	33.1	25.6	18.9

Plot these pairs of values on squared paper, and draw a graph through the points. What is the expectation of life at the age of 13? At what age is the expectation of life 20 years?

- 9 7. (a) A number of gentlemen engaged a supper and agreed to pay \$80 for it. If four should fail to attend, the rest would have to pay \$1 apiece more. How many are there in the party?

- 6 (b) Generalize the problem—replace \$80 by \$ a , 4 by n and \$1 by \$ e . Solve.

- 12 8. The side of a square is 16 inches less than the length of a rectangle, and its perimeter is 4 inches less than the perimeter of the rectangle. The area of the square is 16 square inches greater than the area of the rectangle. Find the side of the square.



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GRADE XI.

ENGLISH COMPOSITION AND RHETORIC.

Time—Two and one-half hours.

Values.

30 1. Write a paragraph on:

“The Book (or Essay or Letter or Newspaper Article) about the War, which has most interested me.”

2. “This project was to take Fort San Juan, on the river of that name, which flows from Lake Nicaragua into the Atlantic; make himself master of the lake itself, and of the cities of Granada and Leon; and thus cut off the communication of the Spaniards between their northern and southern possessions in America. Here it is that a canal between the two seas may most easily be formed,—a work more important in its consequences than any which has ever yet been effected by human power. Lord George Germaine, at that time Secretary of State for the American department, approved the plan; and as discontents at that time were known to prevail in the Nuevo Reyno, in Popayan, and in Peru, the more sanguine part of the English began to dream of acquiring an empire in one part of America, more extensive than that which they were on the point of losing in another. General Dalling’s plans were well formed; but the history and the nature of the country had not been studied as accurately as its geography. The difficulties which occurred in fitting out the expedition delayed it till the season was too far advanced; and the men were thus sent to adventure themselves, not so much against an enemy whom they would have beaten, as against a climate which would do the enemy’s work.”

15 Indicate the qualities of a good paragraph which are exemplified in the above.

30 3. Arrange in the form of a “brief” your arguments *either* for or against (but *not both* for and against) the following proposition: “The recitation-period in the High School course is too short for effective work.”

(OVER)

Values.

50 4. Write a composition on:

The Death of Gordon.

OR

The Decline of Feudalism as reflected in Lytton's *Last of the Barons*.

OR

The Story of *She Stoops to Conquer*.



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GRADE XI.

ENGLISH LITERATURE.

Time—Three hours.

Values.

- 15 1. Describe briefly the two crises, one economic and the other military, on which the story of the first part of *Coriolanus* depends.
2. Three of the characters in this play, Sicinius, Brutus and Coriolanus, may be described as being "in politics."
- 10 (a) Compare the attitude toward politics displayed by Sicinius and Brutus on the one hand and by Coriolanus on the other.
- 5 (b) What weaknesses or defects of a democratic system of government are suggested to you by the careers of these three?
- 10 3. "By the elements,
If e'er again I meet him beard to beard
He's mine or I am his."

Who utters these words and on what occasion? What does the speaker mean by them? In what two senses (both different from the speaker's original meaning) is the prophecy fulfilled?

OR

"Alone he ent'red
The *mortal* gate of the city, which he *painted*
With *shunless destiny*."

Explain the italicized words in the light of the context of the passage, and paraphrase the sentence in your own words.

(OVER)

Values.

- 15 4. "I would they were barbarians—as they are,
 Though in Rome litter'd—not Romans—as they are not,
 Though calved i' the porch of the Capitol."

The lines quoted above are the turning point of the play.
What does Coriolanus mean by this speech and how
does the speech serve to explain, if not to excuse,
Coriolanus' subsequent treachery?

- 20 5. Contrast the characters of Volumnia and Virgilia and their
 attitude towards Coriolanus.

- 20 6. Explain briefly the part played by each of the following
 characters in the story of *Gareth and Lynette*: Bellicent,
 Kay, Launcelot, Lynette.

Make a careful analysis of the character of Launcelot as it
is reflected in *Launcelot and Elaine*.

- 10 7. "I met a traveller from an antique land."

Describe what the traveller said, and interpret the poem.

What meaning did the sculptor intend in the line:

"Look on my works, ye Mighty, and despair"? What
meaning did fate give to the line?

OR

"I am monarch of all I survey."

What actual occurrence inspired this poem? What famous
work of English prose was suggested by the same
incident? How is the thought of the opening line
amplified in the poem?

- 15 8. Quote two passages of not less than eight lines each from
 the poems prescribed for your reading.

- 20 9. Write a brief account—

(a) Of the schemes and ambitions of Dupleix.

(b) Of the reasons for choosing Clive to oppose him.

(c) Of the siege of Arcot.

OR

Summarize the most important events in the career of Surajah
Dowlah from his first rise to power to his final defeat.

- 10 10. Write a character-sketch of Mr. C Collins, as he appears in
 Pride and Prejudice.

OR

Contrast Elizabeth and her sisters.



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GRADE XI.

FRENCH GRAMMAR AND COMPOSITION.

Time—Two and one-half hours.

Values.

1. Translate into French:

- 2 (a) Why did you come home alone?
- 2 (b) Canadians are fighting in France.
- 2 (c) He has gone to Toronto.
- 3 (d) We live in the country, but spend three months every winter in town.
- 2 (e) How long were you in Switzerland?

2. Translate into French:

- 2 (a) To whom have you been writing?
- 2 (b) Everybody admires courage.
- 2 (c) I shall need some new clothes next fall.
- 2 (d) Those two hats are not his, but mine.
- 2 (e) Last year the spring was earlier than this.

3. Translate into French:

- 3 (a) The weather is finer to-day than it has been heretofore.
- 3 (b) It is much easier to read French than to speak it.
- 2 (c) How much did you pay for them a dozen?
- 2 (d) We prefer the books you buy us.
- 2 (e) What is the matter with you?

4. Translate into French:

- 3 (a) When did this war begin? On August fourth, nineteen fourteen.

(OVER)

Values.

- 3 (b) If you will have him tell me what to do, I can please him.
- 3 (c) For fear you might not understand me, I said nothing at all.
- 4 (d) Though she was not asked to go, no one wanted her to remain.
- 5 (e) Take care not to pay more than twenty francs for the goods, even though you think they are worth more.
- 6 (f) I wish you would tell me whose book this is. It has been lying on my table for nearly three weeks and I am afraid it will get lost unless I return it.
- 6 (g) France is a beautiful country, with many ancient cities, and it is a great pity that some of the most beautiful and ancient ones have been ruined by the Germans.
- 4 (h) Even if he said he would not do it, I should not believe him, for however clever he may be, he always makes mistakes.

33 5. Translate into French:

When Benjamin Franklin was five years old, his brother once filled his pockets with coppers. At once the child started off for a shop where toys were sold. Meeting on the way a boy who had a whistle and being charmed by its sound, he gave the boy all his money to have it. Much pleased with his purchase he whistled so much over the whole house that he tired the family, and his brothers and sisters asked him where he had bought the whistle and how much he had paid for it. He replied that he had given all his money to a little boy. Then they told him that he had paid too much for it and that if he had been more prudent, he could have bought ten times as many pretty things. After that, whenever he was tempted to buy things which he did not need, he would think of the whistle.



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GRADE XI.

FRENCH AUTHORS.

Time—Two and one-half hours.

NOTE.—The selections set for translation into English should be rendered into idiomatic English, that is to say English that accords with good usage both in the order and in the choice of words.

Values.

24 1. Translate into English:

Pour la première fois je *compris* bien la mort; ces hommes que j'avais vus deux minutes avant, pleins de vie et de force, chargeant leurs ennemis avec fureur, et bondissant comme des loups, ils étaient là, couchés pêle-mêle, insensibles comme les pierres du chemin.

Dans les rangs des Républicains il y avait aussi des places vides, des corps étendus sur la face, et quelques blessés, les joues et le front pleins de sang; ils se bandaient la tête, le fusil au pied, sans quitter les rangs; leurs camarades les aidaient à serrer le mouchoir et à *remettre* le chapeau dessus.

Le commandant, à cheval près de la fontaine, la corne de son grand chapeau à plumes sur le dos et le sabre au poing, *faisait* serrer les rangs; près de lui se *tenaient* les tambours en ligne, et un peu plus loin, tout près de l'auge, la cantinière avec sa charrette. On entendait les trompettes des Croates sonner la retraite. Au tournant de la rue, ils avaient fait halte; une de leurs sentinelles attendait là, derrière l'angle de la maison commune: on ne voyait que la tête de son cheval. Quelques coups de fusil *partaient* encore.

"Cessez le feu!" cria le commandant.

Et tout se *tut*; on n'entendit plus que la trompette au loin.

La cantinière fit alors le tour des rangs à l'intérieur pour verser de l'eau aux hommes, tandis que sept ou huit

Values.

grands gaillards allaient puiser de l'eau à la fontaine, dans leurs gamelles, pour les blessés, qui tous demandaient à boire d'une voix pitoyable.

- 6 (a) Write out in full the past definite and the conditional of the verbs italicized in the foregoing passage.
- 4 (b) Who is the author of the foregoing passage and in what connection does the passage occur?

25 2. Translate into English:

Le lendemain fut un jour de bonheur pour la maison de l'oncle Jacob.

Il était bien tard lorsque je m'éveillai de mon profond sommeil; j'avais *dormi* douze heures de suite comme une seconde, et la première chose que je vis, ce furent mes petites vitres rondes couvertes de ces fleurs d'argent, de ses toiles transparentes et de ces mille ornements de givre, tels que la main de nul ciseleur ne *pourrait* en dessiner. Ce n'est pourtant qu'une simple pensée de Dieu, qui nous rappelle le printemps au milieu de l'hiver; mais c'est aussi le signe d'un grand froid, d'un froid sec et vif qui succède à la neige; alors toutes les rivières sont *prises* et même les fontaines, les sentiers humides sont durcis et les petites flaques d'eau couvertes de cette glace blanche et friable qui craque sous les pieds comme des coquilles d'oeufs.

En regardant cela, le nez à peine hors de ma couverture et le bonnet de coton tiré jusqu'au bas de la nuque, je *revoyais* tous les hivers passés et je me disais: "Fritzel, tu n'oseras jamais te lever, pas même pour aller déjeuner, non, tu n'oseras pas."

Cependant une bonne odeur de soupe à la crème montait de la cuisine et m'inspirait un terrible courage.

J'étais là dans mes réflexions depuis une demi-heure, et j'avais arrêté d'avance que je sauterais du lit, que je prendrais mes habits sous le bras, et que je *courrais* dans la cuisine m'habiller près de l'âtre, lorsque j'entendis l'oncle Jacob se lever dans sa chambre à côté de la mienne, ce qui me fit juger que les grandes fatigues de la veille l'avaient rendu tout aussi dormeur que moi.

- 5 (a) Write out in full the imperfect subjunctive of the verbs italicized in the foregoing passage.
- 3 (b) Discuss briefly two important characters in the story from which this passage is taken.

3. Translate into English:

- 1 (a) Il se moquait de la nouvelle ère prétendue républicaine.
- 1 (b) Je me moquais bien de ses railleries.
- 1 (c) Nous pouvons dormir en paix sur les deux oreilles.
- 1 (d) Il t'en faut, à toi, du temps pour faire une commission!
- 1 (e) Vous êtes des fous de vous faire du mauvais sang.

J'arrivai heureusement à P . . . Je m'arrêtai à la porte d'une hotellerie d'assez bonne apparence. Je n'eus pas mis pied à terre, que l'hôte vint me recevoir fort civilement; il détacha lui-même ma valise, la chargea sur ses épaules, et me conduisit à une chambre . . . Cet hôte, le plus grand babillard des Asturies, et aussi prompt à conter sans nécessité ses propres affaires que curieux de savoir celles d'autrui, m'apprit qu'il se nommait André; qu'il avait servi longtemps dans les armées du roi en qualité de sergent, et que, depuis quinze mois, il avait quitté le service pour se marier. Il me dit encore infinité d'autres choses que je me serais bien passé d'entendre. Après cette confidence, se croyant en droit de tout exiger de moi, il me demanda d'où je venais, où j'allais et qui j'étais. A quoi il me fallut répondre article par article, parce qu'il accompagnait d'une profonde révérence chaque question qu'il faisait, en priant d'un air si respectueux d'excuser sa curiosité, que je ne pouvais me défendre de la satisfaire. Cela m'engagea dans un long entretien avec lui, et me donna lieu de parler du dessein et des raisons que j'avais de partir le lendemain.



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GRADE XI.

GERMAN GRAMMAR.

Time—Two and one-half hours.

Values.

1. Translate into German:

- 2 (a) This tree is high, but those are much higher.
- 2 (b) All of these things are not mine; the sticks are yours.
- 2 (c) What beautiful birds those are!
- 2 (d) With what are you going to pay him?
- 2 (e) A good conscience is worth more than much money.

2. Translate into German:

- 3 (a) I believed that you were wrong.
- 2 (b) Words spoken in anger harm the speaker.
- 2 (c) Some people are helped too often.
- 3 (d) The books of which you were telling me are not to be had.
- 2 (e) We succeeded in overcoming (überwinden) the greatest obstacles (das Hindernis).

3. Decline in full:

- 3 (a) Derselbe Professor.
- 3 (b) Unser alter Hund.
- 3 (c) Solch eine schwere Arbeit.
- 3 (d) Ihr rechter Name.
- 3 (e) Ein junger Gelehrter.

4. Translate into German:

- 4 (a) He would like to have those books sent to him.
- 5 (b) It was said that they could have been here in time (zeitig), if they had left (aufbrechen) earlier.

(OVER)

Values.

- 4 (c) Knowing that you can do this he commands you to do it.
- 5 (d) I fear that you will not be able to answer these questions, unless you have studied conscientiously (gewissenhaft).
- 5 (e) If we knew what you wished us to do, we should try to do it.

- 3 5. Write the following German sentence in three different ways, merely by changing the word-order, but without changing its character as an independent declarative sentence:

Er hat uns gestern einen langen Brief geschrieben.

- 5 6. Give the third person singular and plural of the following verbs in the present, imperfect, and perfect indicative of the active voice:

zurückbringen, vergessen, unterbrechen, ausgehen, fortsenden.

- 32 7. Translate into German:

Once the king was lying in the window of his palace when he heard behind him a slight (little) noise. Turning about he saw that a page had come into the room. The king asked him what he wished and the page replied that a poor woman was waiting in the antechamber (das Vorzimmer) and wished to speak to him. "Who is she and what does she want?" the king asked a bit irritated (use past participle of *verdriessen*). "She refused to tell me her name and business" (das Geschäft), replied the page. "But you must tell me what she looks like" (how she looks—*aussehen*) before I can see her." The page then told him that she was a little old woman, with white hair, dressed poorly, but neatly (*reinlich*). The king thought a moment, and told the page that he might bring her in. When the old woman entered the room, she bowed (*sich verbeugen*) before the king, and then approached him with tears in her eyes. "What can I do for you?" the king asked. "My only son has been taken from (*wegnehmen*) me," she replied, "and is to become a soldier. I cannot let him go. He has always helped me."



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GRADE XI.

AGRICULTURE.

Time—Two and one-half hours.

Values.

- 2 **1.** (a) Write notes on the agricultural values of the following
2 soils: Loam, clay, humus.
2
3 (b) What are the distinguishing features of these soils and
3 of what are each composed?
3
6 **2.** (a) Describe how strongly alkaline soils may be made pro-
 ductive.
2 (b) What crops succeed best under such conditions?
4 (c) Give suggestions as to the treatment of gumbo areas.
15 **3.** Write an article on soil moisture, dealing with classification,
 sources, conservation.
12 **4.** Of what importance is "air content of soil"? How is a
 proper air volume in the soil secured? What deter-
 mines air movement in soils?
12 **5.** What are influences affecting the temperature of a soil? Make
 clear how these influences act.
20 **6.** Describe the preparation of a good seed bed for alfalfa.
 Explain fully the principles governing each step.
12 **7.** How would you distinguish any two of the following weeds:
 Wild oats, Russian thistle, stinkweed, couch grass?
 Indicate the methods you would advise to control the two
 you select.

(OVER)

Values.

- 12 **8.** Write an account of the relation of bird life to the agricultural industry.
- 15 **9.** Write an article on the errors commonly made in caring for the different classes of live stock in Alberta, and indicate the means you would suggest for correcting these errors.



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GRADE XII.

ALGEBRA.

Time—Three hours.

Values.

- 5 **1.** (a) How many arrangements of the letters of the alphabet
 can be made taking three at a time?
- 6 (b) In how many ways can a crew of 8 men and a hockey
 team of 5 men be made up from 20 men?
- 6 (c) In how many ways may four men and their wives be
 seated around a table so that no man sits next his
 wife?

5 **2.** (a) Solve for x : $x^4 - 3x^2 + 2x - 8 = 0$.

5 (b) Solve for x :

$$3 \left(\frac{x}{3x+2} + \frac{1}{2x-3} \right) - 1 = \frac{7x+9}{(2x-3)(3x+2)}$$

5 (c) Solve the system:

$$\begin{aligned} y+z &= 6xyz. \\ z+x &= 10xyz. \\ x+y &= 12xyz. \end{aligned}$$

5 **3.** (a) Define and illustrate: Ratio, continued proportion, mean
 proportional, duplicate ratio, antecedent.

7 (b) Prove that if $a : b = c : d$
 $a^2 - b^2 : a^2 - 3ab = c^2 - d^2 : c^2 - 3cd$.

7 (c) The distances travelled by a moving body were as follows:

Time from start (in sec.) . .	1	2	3	4	5
Distance (in feet)	2.4	4.7	7.3	9.6	12.05

The distances were measured approximately. Plot the values; and show that the distance travelled was proportional to the time. How far would the body move in 7 seconds?

(OVER)

Values.

- 10 4. (a) A man agreed to pay for the shoeing of his horse as follows: 1 cent for the first nail, 2 cents for the second nail, 4 cents for the third nail, and so on until the 32 nails in the four shoes were paid for. What did the last nail cost? How much did he agree to pay in all?
- 10 (b) A bad writer is requested to find the sum of the first 1000 terms of an arithmetical progression, which he copies down; but when he comes to try it, he finds that the only terms legible are the second and fifth, these being +1 and +7 respectively. What is the sum?
- 5 5. (a) In the expansion of $(a+b)^n$ show that the sum of the coefficients of the odd terms is equal to the sum of the coefficients of the even terms.
- 6 (b) When is the binomial expansion for $(1+x)^n$ an infinite series? In that case what values may x take on?
- 5 (c) Find the general term in the expansion of $(1+3x)^{-4/3}$.
- 6 6. (a) Define direct and inverse variation. Illustrate by means of graphs.
- 10 (b) The illumination of a surface on which the light falls at right angles varies directly as the candle-power of the source of light, and inversely as the square of its distance from the source of light. A horizontal table is lighted by a 16 candle-power lamp, vertically above it and 5 feet distant. (1) If the lamp is raised 2 feet what candle-power is necessary to give the same illumination? (2) If the 16 candle-power lamp is replaced by a 25 candle-power lamp, how much higher may it be hung so as to give the same illumination on the table?
- 2 7. (a) Give an example of an harmonic series. Show the
4 relation between the arithmetic, geometric and harmonic means of two given numbers.
- (b) Find the sum of n terms of each of the following:
- 3 $\frac{1}{1.2} + \frac{1}{2.3} + \frac{1}{3.4} + \dots$
- 3 $a^2 - b^2, a + b, \frac{a+b}{a-b}, \dots$
- 2 $\frac{1}{x}, \frac{1}{x^2}, \frac{1}{x^3}, \dots$ (where $x > 1$).
- 3 (c) Where possible, find the sum to infinity of the series
3 in (b).
2



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GRADE XII.

GEOMETRY.

Time—Three hours.

Values.

- 5 1. (a) Explain with aid of diagrams the following terms: Similar polygons, centre of similitude, projection of one straight line upon another, medial section, orthocentre of a circle.
- 4 (b) AB is divided internally and externally at P and Q in the same ratio. Prove that AP, AB, AQ are in Harmonic Progression.
- 2 (c) Name four Geometric magnitudes that form a continued proportion.
- 3 (d) ABC is a right-angled triangle. From C a perpendicular is dropped to a point D in the hypotenuse. Prove CD is a mean proportional between AD and DB.
- 9 2. If the ratios of the three sides of one triangle to the three sides of another triangle, taken in order, be equal, the triangles are equiangular.

OR

- 9 Construct a rectilineal figure similar to a given rectilineal figure, and having its sides to those of the given figure in a given ratio.
- 6 3. (a) In any triangle, the square on the side opposite the acute angle, is less than the sum of the squares on the sides containing the angle, by twice the rectangle contained by either of these sides and the projection upon it of the other. (Add. Prop. 12.)
- 6 (b) On the side BC of any triangle ABC a square BDEC is described. Show that $DA^2 + AC^2 = EA^2 + AB^2$. For what quadrilateral BDEC other than a square, will this equation hold?

Values.

- 9 4. (a) If three concurrent straight lines be drawn from the angular points of a triangle to meet the opposite sides, then the product of three alternate segments taken in order, is equal to the product of the other three segments. (Add. Prop. 21.)

OR

- 9 If a transversal be drawn to cut the sides or the sides produced, of a triangle, the product of three alternate segments, taken in order, is equal to the product of the other three segments. (Add. Prop. 22.)

- 6 (b) Prove that the bisectors of two of the exterior angles of a triangle and of the remaining interior angle, meet in a point.

- 6 5. (a) Find the area of a triangle in terms of the co-ordinates of its angular points.

- 3 (b) Find the area of a triangle whose angular points are $(4,3)$, $(2,-5)$ and $(-4,2)$.

- 3 (c) What expression gives the distance between two points (x,y) and (X',Y') ?

- 4 (d) Two points $(4,0)$ and $(0,4)$ being given, find two other points with which these are the angular points of two equilateral triangles.

- 5 6. Draw a pair of rectangular axes and plot the following graphs:

$$x+y=52.$$

$$2x+y=8.$$

- 3 7. (a) A line passes through the points $(-4,0)$ and $(0,-3)$ on the axes. Find its equation.

- 5 (b) A straight line inclined at an angle of 30° to the axis of X has an intercept (4) on the Y axis. Find the equation of the line.

- 3 (c) Find the equation of a straight line through the two points $(-3,-1)$ and $(4,-5)$.

- 5 (d) A straight line passes through the point $(3,-2)$ and makes an angle of 45° with the axis of X. Find its equation.

- 7 8. (a) Find the general equation of all straight lines through a fixed point.

- 6 (b) From this equation find the lengths of the intercepts on the axes, and the direction-cosines of the line.

OR

Values.

- 7 (a) Find the angle between two straight lines whose equations are
 $y = mx + b$, and
 $y = m'x + b'$.
- 1 On what condition will this angle be 90° ?
- 5 (b) Find the equation of the straight line through the point $(2, -3)$ and perpendicular to $2x - 5y - 1 = 0$.
- 6 **9.** (a) Find the equation of the circle whose centre and radius are given.
- 7 (b) Find the centre and the length of the radius of the circle:
 $x^2 + y^2 + 10x + 4y + 4 = 0$.
- 9 **10.** (a) Find the equation of the tangent to the circle $x^2 + y^2 = r^2$ in terms of the co-ordinates of the point of contact $(x'y')$.
- 3 (b) Find the equation of the tangent to the circle $x^2 + y^2 = 25$ at the point $(-3, 4)$.



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GRADE XII.

COMPOSITION AND RHETORIC.

Time—Two and one-half hours.

Values.

- 35 1. Write a compact description of the governmental machinery of the Province of Alberta.

OR

Write a composition contrasting the meaning of the word *comfort* as it was understood in your grandfather's day with what it means to-day.

- 25 2. Arrange in the form of a "brief" the main arguments in support of the following resolution:

"The High School should have one long session a day instead of two shorter ones."

Outline the important points under each main argument and arrange them with regard to proper development of the thought.

- 40 3. Write a composition on *one* of the following topics:
1. Description of three pilgrims in Chaucer's Prologue.
 2. Beowulf's Swimming Match with Breca.
 3. The Fight with Grendel.
 4. The Character of Coriolanus.

- 25 4. Answer the following questions in a connected, expository theme:

What is a paragraph?

What constitutes a good paragraph?

What is a topic-sentence? Its value?

In developing a topic-sentence what are the requirements of the principles of Unity, Coherence, Emphasis?



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GRADE XII.

TRIGONOMETRY.

Time—Three hours.

Values.

- 10 1. (a) Define and illustrate: Initial side of an angle, radian, supplementary angles, trigonometrical identity, inverse sine.
- 6 (b) How many complete revolutions in 100,000 degrees? How many radians? In a circle of radius 6 feet, what is the length of the arc that subtends at the centre an angle of 100,000 degrees?
- 6 2. (a) Find the relation between $\sin 580^\circ$ and $\sin 40^\circ$, between $\cos 580^\circ$ and $\cos 40^\circ$, and between $\tan 580^\circ$ and $\tan 40^\circ$. Of what value are such relations?
- 8 (b) Put the expression $2 \tan^2 x + \sin^4 x$ entirely in terms of $\cos x$ and find its value when $\cos x = 0.4$.
- 10 3. Two sailors climb to the top of a mast, at 1 foot per second along a straight rope inclined at 30° to the mast, and at $1\frac{1}{4}$ feet per second along another rope at 45° to the mast. Compare their times for the ascent, the height of the mast being 30 feet.
- 6 4. (a) Find an expression for the area of a triangle in terms of two sides and the angle included between them.
- 6 (b) Find the area of the regular octagon inscribed in the circle whose radius is 2 cms.
- 6 5. (a) Construct the angle x if $\tan x = -\frac{5}{12}$. Find $\sin x$ and $\sec x$.
- 9 (b) Discuss each of the relations:
 $\tan (90 - x) = \cot x$.
 $\sin 2x = 2 \sin x$.
 $\cos^2 x = 4$.

(OVER)

Values.

- 8 6. (a) Prove geometrically the addition formula:

$$\sin(A+B) = \sin A \cos B + \cos A \sin B,$$

for the case in which all the angles are acute.

- 9 (b) From the formulas for $\sin(A+B)$, $\cos(A+B)$, etc., prove formulas for $\sin A - \sin B$ as a product; $\sin 2A$ in terms of $\sin A$; and $\sin A$ in terms of $\cos 2A$.

- 6 7. (a) For any plane triangle prove the law of sines.

- 8 (b) Prove the identities:

$$\frac{\cos A}{1 - \tan A} + \frac{\sin A}{1 - \cot A} = \sin A + \cos A.$$

$$\cot(A + 45^\circ) = \frac{\cot A - 1}{\cot A + 1} = \frac{1 - \sin 2A}{\cos 2A}$$

- 12 8. (a) Solve the triangle whose sides are 3.41, 2.60 and 1.58.

$$\log 3.85 = 0.58546 \quad \quad \quad \angle \tan 53^\circ 23' 20'' = 10.12903$$

$$\log 1.195 = 0.07737 \quad \quad \quad \angle \tan 23^\circ 26' 37'' = 9.63713$$

$$\log 2.215 = 0.34537 \quad \quad \quad \angle \tan 13^\circ 10' 3'' = 9.36912$$

$$\log 3.795 = 0.57921$$

- 10 (b) Evaluate $\log_b b$, $\log_{b^2} b$, $\log_b 1$

$$\text{and } \log_a b, \log_b c, \log_c a$$

- 5 (c) Solve the simultaneous equations for x and y :

$$\sqrt[x]{y} = a, \quad \sqrt[x+1]{y} = b.$$



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GRADE XII.

CHEMISTRY.

Time—Two and one-half hours.

NOTE.—Candidates may take either questions 9 or 10, but not both.

Values.

- 8 **1.** (a) Describe an experiment to show how you would remove both carbon dioxide and moisture from the air, and to estimate the weight of each which had been removed.
- 3 (b) Make a neat drawing of the apparatus used in (a).
- 6 **2.** (a) Knowing that one volume of hydrogen combines with one volume of chlorine to form two volumes of hydrochloric acid, give the course of reasoning from which you would conclude that the molecule of hydrogen contains at least two atoms.
- 6 (b) Explain clearly what is meant by the Periodic law in chemistry.
- 3.** Put into a eudiometer about 2 c.c.'s of strong sulphuric acid and then fill it with water. Cut a piece of magnesium ribbon of uniform width and thickness exactly one inch long and roll it into a little ball; then place it on the surface of the water in the eudiometer and press the thumb tightly over the mouth of the tube. As soon as the magnesium sinks far enough to come into contact with the diluted acid invert the eudiometer in a tall cylinder filled with water from the tap. Pour water on the eudiometer to cool the gas it contains to the temperature of the water in the cylinder. Depress the eudiometer until the water stands at the same level in the cylinder and the eudiometer and carefully note the volume of the gas which the eudiometer contains. (The magnesium will have entirely disappeared.)

Values.

Repeat the experiment using a piece of magnesium ribbon one-half an inch in length.

- 1 (1) What is the gas which was formed by the action of the acid on the magnesium?
- 2 (2) Write the equation expressing the reaction.
- 2 (3) Compare accurately the volumes of gas formed in the two parts of the experiment.
- 2 (4) What is the object of depressing the eudiometer until the water is at the same level inside and outside the eudiometer?
- 1 (5) What general law of chemistry is illustrated by the above experiment?
- 2 (6) State the law.

4. By means of equations express the chemical changes which take place in the following experiments:

- 4 (a) A small piece of iron wire is dissolved in hydrochloric acid and ammonium hydroxide added to the solution in excess.
- 3 (b) Sulphuretted hydrogen in excess is added to a solution of caustic potash.
- 3 (c) Air, nitrogen trioxide, sulphur dioxide and steam are brought together in a leaden chamber.
- 3 (d) Chlorine gas is slowly passed into a jar of sulphuretted hydrogen gas.
- 3 (e) A small piece of yellow phosphorus is gently heated in a flask containing a solution of caustic potash, the air having been displaced from the flask by nitrogen gas, ether or carbon dioxide.

- 9 5. (a) Describe Marsh's test for arsenic.
- 3 (b) Make a neat drawing of the apparatus used in (a).
- 2 (c) Why is it necessary to test the reagents used in the experiment in (a)?

- 6 6. (a) Indicate four methods of forming chlorides and illustrate each by writing an equation.
- 4 (b) How would you separate lead chloride from a precipitate containing only lead chloride and silver chloride?

7. Write equations expressing the chemical reactions in the following experiments, and state clearly the physical condition in which each of the products of the reactions exists:

- 2 (a) Potassium nitrate is heated with sulphuric acid in a Florence flask.
- 1
- 1

Values.

- 2 (b) To a solution of sodium silicate hydrochloric acid in excess
1 is added.
1
- 2 (c) Ammonium sulphate is warmed with a solution of sodium
1 hydroxide.
1
- 8 8. (a) Describe the manufacture of sodium carbonate by the
Le Blanc process.
- 6 (b) Write the equations expressing the chemical changes
involved in (a).
- 8 9. (a) Give a brief account of the manufacture of glass.
- 6 (b) What are substances used in making Bohemian glass,
flint glass and strass respectively?

OR

- 10 10. (a) Give a concise account of the metallurgy of zinc.
- 4 (b) Write a short account of the commercial uses of zinc.
11. How would you make each of the following in the laboratory:
- 3 (a) Aluminium hydroxide?
- 3 (b) Lead acetate?
- 3 (c) Stannic chloride?
- 3 (d) Potassium bichromate.



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GRADE XII.

ENGLISH LANGUAGE AND HISTORY OF LITERATURE.

Time—Two and one-half hours.

Values.

- 5 1. What were the four principal dialects of Anglo-Saxon?
- 5 2. What were the most important changes in the form and vocabulary of the language effected by the Norman Conquest?
- 5 3. Describe briefly the successive changes which the personal pronouns and the pronoun *who* have undergone from Anglo-Saxon to Modern English.
- 5 4. What dialect ultimately became the approved English speech, and why?
- 5 5. "*Where be thy sons?*"
 "*It blesseth him that gives.*"
 Comment on the history of the verb-forms italicized above.
6. Define briefly the three types:
- 2 (a) Epic.
- 2 (b) Lyric.
- 2 (c) Dramatic.

OR

Define:

- (a) The heroic couplet.
- (b) Blank verse.
- (c) The sonnet.

OR

(OVER)

Values.

What is:

- (a) A pastoral?
- (b) An allegory?
- (c) A satire?

- 5 **7.** Name two Anglo-Saxon poets and give a brief account of their works.
- 3 **8.** (a) At what period did Chaucer write?
- 3 (b) Name three important poems of Chaucer's other than the Canterbury Tales, and give an account of one of these three.
- 3 (c) Mention three authors contemporary with Chaucer and name at least one work by each.
- 4 **9.** At what period and by whom was printing introduced into England?
- 10 **10.** Give, approximately, the dates of the "Elizabethan period" and describe briefly the most important characteristics of that period.
- 10 **11.** Give the dates of Shakespeare's career as a dramatist, and name two of his tragedies, two of his comedies, two of his plays dealing with English history, and two of his plays dealing with Roman history.
- 5 **12.** What historical event put an end to the writing of plays in the seventeenth century and when was dramatic activity renewed?
- 2 **13.** (a) When did Alexander Pope live?
- 2 (b) What were some of his most important poems?
- 2 (c) What is the name usually given to the period of which he was the dominant figure?
- 2 (d) Why is it so called?
- 14.** (a) Name the author of—
- 2 (1) The Seasons.
- 2 (2) The Deserted Village.
- 2 (3) The Elegy in a Country Churchyard.
- 2 (4) The Castle of Indolence.
- 5 (b) What characteristics have these poems in common, and what movement or tendency do they represent?
- 5 **15.** Write a brief account of Samuel Johnson.



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GRADE XII.

ENGLISH LITERATURE—PALGRAVE AND PROSE.

Time—Two and one-half hours.

Values.

1. "When in disgrace with fortune and men's eyes."
 - 3 (a) What are the ungratified desires which Shakespeare sets forth in this poem?
 - 3 (b) What comparison does the possible happiness referred to in the latter part of the poem suggest to him?
- 6 2. "Queen and Huntress, chaste and fair."

What traditions concerning Diana are alluded to in this poem, and what symbols of her are named?
- 3 3. "Calm was the day and through the trembling air."
 - 3 (a) For what event was this poem written?
 - 3 (b) What do the "two swans" symbolize?
 - 3 (c) Quote the two lines which constitute the refrain of the poem.
- 12 4. "'Twas at the royal feast for Persia won."

A critic has admirably said of this poem: "Dryden gives us . . . a rapid series of flashlight pictures, each expressed in verse that by its music suggests the scene described." Describe briefly the successive pictures, and illustrate some of the changes of rhythm.
5. "When I consider how my light is spent."
 - 4 (a) Give enough information about the author to explain the general significance of the poem.
 - 4 (b) Explain the italicized passage in the following quotation from the poem, with especial reference to the poet's later work:

"And that one talent which is death to hide
Lodged with me useless, *though my soul more bent*
To serve therewith my Maker."

(OVER)

Values.

- 6 **6.** In what respects was Carlyle fitted to write intelligently and sympathetically about Burns?
- 6 **7.** What was the chief limitation in Carlyle's understanding and appreciation of poetry?
- 5 **8.** (a) What qualities does he emphasize, and what qualities does he conspicuously omit, in his definition of "a true poet"?
- 10 (b) What are the chief merits of Burns' poetry, as Carlyle enumerates them?
- 14 **9.** Explain briefly the significance of any *two* of the following, in bringing about the crisis which Burke deals with in the speech on Conciliation:
- (a) The Stamp Act.
- (b) The Quartering Act.
- (c) The Hutchison Letters.
- (d) The Tax on Tea.
- 10 **10.** What are the several objections offered by Burke to the policy of subduing the colonies by force?
- 8 **11.** What, in your judgment, are the reasons for the general opinion that the Conciliation Speech is a model of argumentation?



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GRADE XII.

ENGLISH LITERATURE—SHAKESPEARE AND MILTON.

Time—Two and one-half hours.

Values.

- 5 **1.** What reasons does Lear give for dividing his kingdom?
- 5 **2.** "Fathers that wear rags
 Do make their children blind,
 But fathers that bear bags
 Shall see their children kind."
 Interpret this song of the Fool's as a comment on Lear's judgment.
- 5 **3.** Why do you think Shakespeare selects the Fool as Lear's chief adviser?
- 5 **4.** (a) Give the substance of Cordelia's reply to Lear's question as to her love for him.
- 5 (b) Two explanations of Cordelia's attitude are given in the play, one by Kent, and one by France. What are these explanations?
- 5 (c) What is your own judgment of Cordelia's attitude on this occasion?
- 10 **5.** In what ways, in the earlier part of the play, are we prepared for Lear's display of madness in the scene on the heath?
- 10 **6.** Make a brief comparison between the character and experiences of Lear and the character and experiences of Gloucester.

OR

Contrast the characters of Edgar and Edmund.

(OVER)

7. "No, my good lord; I am the very man
That, from your first of difference and decay,
Have followed your sad steps."

5 (a) Who utters these words, and when?

5 (b) Justify them, by citing several instances of the speaker's fidelity.

10 8. Make a list of those characters in the play who are unfaithful to Lear. Of those who are faithful to him. Name one or more vices or faults of character common to the first group. Name one or more virtues common to the second group. In the light of this analysis, what seems to you to be the moral problem or theme of the play?

10 9. Name, with a brief word of description, the "Powers and Dominions" who respond to Satan's appeal, in the second book of *Paradise Lost*.

10 10. "And bring ye to the place where thou and Death
Shall dwell at ease, and up and down unseen
Wing silently the buxom air, embalmed
With odors."

"So eagerly the Fiend
O'er bog or steep, through strait, rough, dense, or rare,
With head, hands, wings, or feet, pursues his way,
And swims, or sinks, or wades, or creeps or flies."

Read these two passages (being careful to enunciate to yourself as well as read) and then write out a comparison of them in respect to, (a) content or subject matter, and (b) rhythm or effect upon the ear.

10 11. Describe the two guardians of Hell Gate, and relate the story of Satan's encounter with them.

OR

Name the two "Powers of the nethermost Abyss," and describe Satan's interview with them.



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GRADE XII.

FRENCH GRAMMAR AND COMPOSITION.

Time—Two and one-half hours.

Values.

1. Translate into French:

- 3 (a) Rain or shine they were seen every morning walking through the park on their way to town.
- 3 (b) He declared that he would as soon die as live without liberty.
- 5 (c) It is a pity that few people take the trouble to know what is right even though they may be anxious to do right.
- 4 (e) Even though you do not trust him, you should not tell him so. In this case silence is better than speech.
- 4 (f) I cannot do what you request without harming my best friend, and that you surely do not desire.
- 5 (g) Unless we hear from you shortly we shall be greatly troubled; for hardly had we returned to Canada when the Germans invaded France.
- 4 (h) Whatever you do and whatever be your reasons, we shall trust you. You are the best friend we have.
- 6 (i) We regret very much that you have gone. Though he is angry that we blame him for your departure, we still fear that he said too much.

(OVER)

Values.

33 2. Translate into French:

Many years ago there lived in the city of Paris a celebrated physician who was very fond of animals. One day a friend of his brought to his house a favorite dog, whose leg had been broken. After examining the dog the kind doctor prescribed a treatment that soon cured him. His friend was greatly pleased, for he set a high value upon his dog, and wished to show his gratitude. But he did not know just how to do so. Not very long afterwards the doctor was in his room studying. He thought he heard a noise at the door as if some animal was scratching in order to be let in. At first he paid little attention to the noise, but continued studying. At last, however, he rose up, opened the door, and saw to his great astonishment, the dog he had cured and with him another dog, who had a broken leg. The former seemed to be bringing the latter to his benefactor in order that his leg, too, might be healed.

33 3. Write a French composition of not less than one hundred words, outlining briefly the substance of the story of *Colomba* or *Gendre de M. Poirier*.



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GRADE XII.

FRENCH AUTHORS.

Time—Two and one-half hours.

NOTE.—The selections set for translations into English should be rendered into idiomatic English, that is to say English that accords with good usage both in the order and in the choice of words.

Values.

15 1. Translate into English:

POIRIER.—Je n'y reviens que pour mémoire . . . Je reconnais que j'ai eu tort d'imaginer qu'un gentilhomme *consentirait* à s'occuper comme un homme, et je passe condamnation; mais, dans mon erreur, je vous ai laissé mettre ma maison sur un ton que je ne peux pas *soutenir* à moi seul; et puisqu'il est bien convenu que nous n'avons à nous deux que ma fortune, il me paraît juste, raisonnable et nécessaire de supprimer de mon train ce qu'il me faut *rabattre* de mes espérances. J'ai donc songé à quelques réformes que vous approuverez sans doute.

GASTON.—Allez, Sully! allez, Turgot! . . . coupez, taillez, j'y consens! Vous me trouvez en belle humeur, profitez-en!

POIRIER.—Je suis ravi de votre condescendance. J'ai donc décidé, arrêté, ordonné . . .

GASTON.—Permettez, beau-père: si vous avez décidé, arrêté, ordonné, il me *paraît* superflu que vous me consultiez.

POIRIER.—Aussi ne vous consulté-jepas; je vous *met*s au courant, voilà tout.

- 5 (a) Write in full the past definite and the present subjunctive of the verbs italicized in the foregoing passage.

- 5 (b) Translate into idiomatic English:
 Détrompe-toi, je mène un train de prince, je fais courir.
 Il paraît que vous lui en faites voir de grises à ce pauvre homme.
 Est-ce que le marquis te ferait des traits, par hasard?
 Ça ne se prend pas comme un rhume.
 Avez-vous pris votre parti?—Non, monsieur; mais j'ai pris un parti.
- 5 (c) From what play is the foregoing passage taken? Discuss briefly its plot and indicate at what point the passage occurs.
- 6 (d) Outline the author's literary career, the peculiar characteristics of his plays, and the judgment of critics as to the particular value of the play from which the foregoing passage is taken.
- 21 2. Translate into English:
 Les deux bandits étaient sans armes, au moins apparentes; ils avaient la cartouchiere à la ceinture, mais point le pistolet qui en est le complément obligé. En entrant dans la salle, ils ôtèrent respectueusement leurs bonnets.
 On peut *concevoir* l'effet que *produisit* leur subite apparition. Le maire pensa tomber à la renverse; ses fils se jetèrent bravement devant lui, la main dans la poche de leur habit, cherchant leurs stylets. Le préfet fit un mouvement vers la porte, tandis qu'Orso, saisissant Brandolaccio au collet, lui cria: "Que viens-tu faire ici, misérable?"
 "C'est un guet-apens!" s'écria le maire essayant *d'ouvrir* la porte; mais Saveria l'avait fermée en dehors à double tour, d'après l'ordre des bandits, comme on *sut* ensuite.
 "Bonnes gens!" dit Brandolaccio, "n'ayez pas peur de moi; je ne suis pas si diable que je suis noir. Nous n'avons nulle mauvaise intention. Monsieur le préfet, je suis bien votre serviteur.—Mon lieutenant, de la douceur, vous m'étranglez.—Nous venons ici comme témoins. Allons, parle, toi, Curé, tu as la langue bien pendue.
 —Monsieur le préfet," dit le licencié, "je n'ai pas l'honneur d'être connu de vous. Je m'appelle Giacanto Castriconi, plus connu sous le nom du Curé . . . Ah! vous me *remettez!* Mademoiselle, que je n'avais pas l'avantage de connaître non plus, m'a fait prier de lui donner des renseignements sur un nommé Tomaso Bianchi, avec lequel j'étais détenu, il y a trois semaines, dans les prisons de Bastia."
- 5 (a) Write the principal parts of the verbs italicized in the foregoing passage.
- 3 (b) Who is the author of the story from which the foregoing quotation is taken? State the leading events of his life.

- 5 (c) Characterize the author's style and explain what is meant by the statement: "L'énergie, même dans les mauvaises passions, excite toujours en nous l'étonnement et une admiration involontaire."

30 3. Translate at sight into English:

Jean Racine à son Fils.

Vous me faites plaisir de me rendre compte des lectures que vous faites, mais je vous exhorte à ne pas donner toute votre attention aux poètes français. Songez qu'ils ne doivent servir qu'à votre récréation, et non pas à votre véritable étude. Ainsi je souhaiterais que vous prissiez quelquefois plaisir à m'entretenir d'Homère, de Quintilien, et des autres auteurs de cette nature. Quant à votre épigramme, je voudrais que vous ne l'eussiez point faite. Outre qu'elle est assez médiocre, je ne saurais trop vous recommander de vous point laisser aller à la tentation de faire des vers français, qui ne serviraient qu'à vous dissiper l'esprit: surtout il n'en faut faire contre personne.

M. Despréaux a un talent qui lui est particulier, et qui ne doit point vous servir d'exemple ni à vous, ni à qui que ce soit. Il n'a pas seulement reçu du ciel un génie merveilleux pour sa satire; mais il a encore outre cela un jugement excellent, qui lui fait discerner ce qu'il faut louer, et ce qu'il faut reprendre. S'il a la bonté de vouloir s'amuser avec vous, c'est une des grandes félicités qui vous puissent arriver; et je vous conseille d'en bien profiter, en l'écoutant beaucoup, et en décidant peu.



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GRADE XII.

GERMAN GRAMMAR AND COMPOSITION.

Time—Two and one-half hours.

Values.

1. Translate into German:

- 3 (a) We have been sitting here for more than an hour waiting
 for you. You should be more punctual.
- 4 (b) You were advised repeatedly to be more diligent. If
 you had followed the advice given you, you would
 have no difficulties now.
- 3 (c) Might and right are not equivalent (gleichwertig) terms
 (der Begriff), though they appear to be so regarded by
 some people.
- 3 (d) Would you rather go out driving this afternoon, or would
 you be just as content to remain at home?
- 4 (e) On being informed that he could not have found a place
 even if he had come much earlier, he asked whether
 he might not speak to the (Mr.) director.
- 3 (f) She would like to be able to play better, but she will
 not take enough pains in practicing.
- 3 (g) Captain C.'s Company would not have suffered so severely
 if he had been more careful before beginning the attack
 (der Angriff).
- 4 (h) Instead of desiring to harm you, as you seem to believe,
 we intended to help. We are very sorry, indeed, that
 you should have misunderstood our intention.
- 3 (i) Does he remember his visit well enough to be able to tell
 you whether he remained with you two or three days?
- 4 (j) I believe you were right, though some time ago I thought
 that you were wrong. Unhappily many of your friends
 still believe that you were wrong.

(OVER)

Values.

33 **2.** Translate into German:

My home is in the country. From its windows I look out upon broad fields and low hills, and every morning I like to go to my bedroom window shortly after sunrise and listen to the birds singing in the trees. Perhaps you think that I am lonely, but that is not the case (der Fall). First of all, I have my books, always loyal friends. Then, too, I never lack the company of other friends who live in the city nearby and often drive or even walk out to my little house of an afternoon or Sunday morning. I do not remain in this home, as a rule, more than three months every summer, but this year I have promised my best friend to stay until October, since he would very much like to visit me for several weeks late in September. Instead of returning to town, I shall then go with him to the mountains for a week, for my friend insists that I must see them in the fall. But before leaving here I shall write you again.

33 **3.** Write a composition in German of not less than one hundred words, outlining the plot of *Die Journalisten*.



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GRADE XII.

GERMAN AUTHORS.

Time—Two and one-half hours.

NOTE.—The passages set in the following paper should be rendered into idiomatic English, that is to say, English that accords with good usage in the choice of words and phrases and in sentence-structure. Mere transliteration will not suffice. Remember that the involved German style can seldom be imitated in English, and do not hesitate to “break up” involved sentences into simpler forms. The translation should, however, reproduce the meaning exactly.

Values.

24 1. (a) Translate into English:

BOLZ.—Wir sollten die Schuld *tragen*, dass Sie zu unserer Partei kämen? Niemals! Unser Gewissen ist zart, es empört sich gegen Ihren Vorschlag.

SCHMOCK.—Wozu machen Sie sich Sorgen um das? Ich habe bei dem Blumenberg gelernt, in allen Richtungen zu schreiben. Ich habe geschrieben links, und wieder rechts. Ich kann schreiben nach jeder Richtung.

BOLZ.—Ich sehe Sie haben Charakter. Ihnen kann's in unserer Zeit gar nicht fehlen. Ihr Anerbieten ehrt uns, aber wir können es jetzt nicht *annehmen*. Eine so welter-schütternde Begebenheit, wie Ihr Übertritt, will reiflich *erwogen* sein.—Unterdes sollen Sie Ihr Vertrauen keinem fühllosen Barbaren geschenkt haben.—(Beiseite zu den andern).

Vielleicht ist etwas aus ihm herauszulocken!—Bellmaus, du hast das beste Herz unter uns dreien, du muszt dich heute seiner annehmen.

BELLMAUS.—Was soll ich denn aber mit ihm anfangen?

BOLZ.—Führe ihn nach der Restauration, setze dich mit ihm in eine Ecke und *giesse* ihm Punsch in alle Löcher seines armen Kopfes, bis seine Geheimnisse *herausspringen* wie nasse Mäuse. Mache ihn schwatzen, besonders über die Wahlen. Geh, Kleiner, und sei hübsch vorsichtig, dasz du nicht selbst warm wirst und plauderst.

BELLMAUS.—Auf die Art werde ich von dem Feste nicht viel sehen.

BOLZ.—Das wirst du nicht, mein Sohn! Aber was hast du an dem Feste? Hitze, Staub und alte Tanzmusik. Übrigens bist du ja ein Dichter und kannst dir das Ganze viel schöner vorstellen, als es in der Wirklichkeit ist.

- 5 (b) Inflect the verbs italicized in the foregoing passage, in the third person singular of the present, imperfect, and perfect indicative, active voice.
 - 3 (c) Explain briefly the political allusion in the sentence, quoted in the foregoing passage: Ich habe geschrieben links, und wieder rechts.
 - 3 (d) Discuss briefly the author's purpose in writing the drama from which the foregoing extract is taken.
- 20 2. (a) Translate into English:

Der Verwalter, der ihm seinen Strohhut *nachbringen* wollte, kam zu spät und sah seinen Herrn nur gerade noch um die nächste Ecke verschwinden. Noch mehr hatte er Ursache, den Kopf zu schütteln, als er den Tag überhaupt nicht wiederkam, am folgenden Tage statt seiner nur ein Briefchen mit dem Mittagsdampfer, man solle ihn nicht erwarten, er *wisse* selbst nicht, wie lange er ausbleibe,—und dann vier bis fünf Tage nichts mehr, da doch seine Anwesenheit während der Lese besonders nötig gewesen ware. Endlich am sechsten Tage—der Frönebel lag noch dicht und zähe über Flusz und Hügeln, und die Sonne schien ihn heute nicht bezwingen zu können—*erklang* Hufschlag am Terrassentor, und die Winzer sahen den jungen Gutsherrn langsam heraufreiten, Ross und Reiter sichtbar ermüdet und der Pflege bedürftig. Aber auch jetzt noch erhielt der besorgt sich erkundigende Verwalter keine Auskunft. Als er die Briefe überreichte, die inzwischen *eingelaufen*, glaubte er zu bemerken, dasz der Herr mit einer gewissen Angst die Adressen *überflog*, ob keine von jener geheimnisvollen Hand darunter sei, und zufrieden aufatmete, da es nur Gesellschaftsbriefe waren. Dann muszte er den Herrn allein lassen, der auch sogleich sich an seinen Schreibtisch setzte, um einen Brief zu schreiben, über dessen Fassung er nun lange genug gebrütet hatte.

- 5 (b) Explain in the sentence: man solle ihn nicht erwarten, the force of the verb "solle," the form and the position of the verb.

- 5 (c) Inflect the verbs italicized in the foregoing passage, in the third person plural of the imperfect and pluperfect subjunctive (active voice).
- 5 (d) Who is the author of the story from which the foregoing extract is taken, what is his literary repute, and what is the connection of the extract with the story.
- 30 3. Translate at sight into English:

Im Herbst des Jahres 1787 unternahm Mozart in Begleitung seiner Frau eine Reise nach Prag, um seine Oper Don Juan daselbst zur Aufführung zu bringen. Sie fuhren in einem mit Postpferden bespannten Wagen, den ihnen eine reiche Gönnerin freundlichst zur Verfügung gestellt hatte.

Gegen Mittag kamen sie in einem kleinen Dorfe an, wo sie sich ein wenig ausruhen und speisen wollten. Wie gewöhnlich überliesz Mozart seiner einsichtigen Frau die Bestellung des Essens und machte sich dann, während sie sich auf ein Stündchen schlafen legte, auf den Weg nach dem nahegelegenen gräflichen Schlosse, dessen Park er allzugerne besichtigen möchte, falls das Fremden erlaubt sei. Da die gräfliche Familie zufällig ausgefahren war und das Gartentor offenstand, begab er sich ohne weiteres in die Parkanlagen, und nachdem er eine Zeitlang im schattigen Grün herumgewandert war, lenkte er seine Schritte auf einen Springbrunnen zu, den er in der Nähe plätschern hörte. Neben diesem Springbrunnen, an dessen Rand Orangen- und Lorbeerbäume standen, erblickte er eine Laube, deren Bank ihm ein angenehmes Ruheplätzchen zu versprechen schien. Hier nun setzte er sich nieder. Das Ohr behaglich dem Geplätscher des Wassers hingegeben und das Auge auf die schönen fremdländischen Bäume gerichtet, fing er an zu träumen und träumte sich zurück in seine Knabenjahre, wo er einmal mit seinem Vater eine Reise nach Italien gemacht hatte. Damals war er auch nach Neapel gekommen, und jetzt stieg das Bild der wunderschönen Bucht in seiner Erinnerung wieder auf. Im Geiste sah er wieder die bunte Menge am Gestade, das schimmernde Meer und die vielen kleinen Schiffe, die auf dessen Busen hin und her fuhren. Er hörte den Gesang der Schiffer, wie es aus der Ferne über das Wasser zu ihm herüberschallte. Und wie er so in der Laube saß und doch im Geiste in Italien weilte, kam ihm plötzlich eine längstvergessene Melodie in den Sinn. Sogleich nahm er Bleistift und Papier aus der Tasche und schrieb dieselbe nieder. Es war das Tanzliedchen, das in seiner Oper Figaros Hochzeit von Masetto und Zerline gesungen wird.



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GRADE XII.

HISTORY.

Time—Two and one-half hours.

Values.

- 20 1. "During a great part of the modern age a doctrine known as the balance of power has lain at the bottom of much European diplomacy. It has been the concern of statesmen to see to it that no one of the nations should acquire an overweight of power or influence, and thereby endanger the independence of the others. But in spite of this vigilance there has been a constant tendency to a disturbance of the equilibrium of the European system of states through the overgrowth of this or that member of it The alliances formed and wars fought to prevent such disturbances of the balance of power, or to restore the equilibrium already impaired, make up a great part of the political history of Europe in modern times."—*Myers*.

By a survey of modern history, explain this statement, pointing out particularly the part England has played.

- 18 2. Explain why the advance of Protestantism for a while was triumphant and then was checked.

OR

- 6 (a) Draw a map of Europe.
- 12 (b) Mark the following places and add short notes on their historical significance: Worms, Lepanto, Trafalgar, Leipzig, Waterloo, Sedan.
- 9 3. (a) Give an account of the rise of the Dutch Republic.
- 8 (b) Compare it with the rise of the American Republic.

OR

(OVER)

Values.

- 17 "The Commissioners at Vienna, blind to the spirit and tendencies of the times, did set up once more the broken idol,—only, however, to see it flung down again by the memorable political upheavals of the next half century."—*Myers*.

Explain this statement.

4. Write notes on any *three* of the following:

- 6 (a) Roumania and the War.
6 (b) Greece and the War.
6 (c) United States and the War.
6 (d) British Sea Power and the War.
6 (e) The Gallipoli Campaign.
- 17 5. "The efficient secret of the English Constitution may be described as the close union, the nearly complete fusion of the executive and legislative powers."—*Bagehot*.

Explain fully.

OR

Describe the functions of the British sovereign to show why a good monarch can do much good, an idle monarch "little good and as little harm," and a bad monarch much harm.

- 12 6. (a) Discuss fully the following statement: "The party system makes Parliamentary government workable but it likewise makes for instability."
- 6 (b) What effect has the war had upon party government in England, and why?
7. Explain fully the following:
- 6 (a) "This is the mode in which the House of Lords came to be what it now is, a chamber with (in most cases) a veto of delay with (in most cases) a power of revision, but with no other rights or powers."—*Bagehot*.
- 6 (b) "With a perfect Lower House it is certain that an Upper House would be scarcely of any value."—*Bagehot*.
- 5 (c) "The very element which was wanted to the House of Lords was, as it were, offered to the House of Lords, and they refused it."—*Bagehot*.



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GRADE XII.

LATIN GRAMMAR AND PROSE COMPOSITION.

Time—Two and one-half hours.

Values.

- 6 1. (a) Decline throughout both numbers the phrase:
 idem vetus sedile.
- 4 (b) Write the following phrases in Latin:
 to the Roman senate; of a long day; by a sharp fight;
 of mighty Jupiter.
- 8 2. (a) Give the comparisons of the following adjectives and
 adverbs:
 feliciter, difficulter, benevolus, nequam, parum, potior,
 inferior, vetus.
- 2 (b) Write the following phrases in Latin:
 of better armies; wiser plans.
- 10 3. (a) Give the principal parts of the verbs indicated by the
 following forms:
 frangat, corrigas, seiungatur, cedas, secerne, confido,
 rapiebat, peperit, referam, animadvertis.
- 5 (b) Write the Latin forms for the following:
 1. Ind. Pass. Pres. 2nd Sing. *fero.*
 2. Participle Act. Pres. Gen. Sing. *abeo.*
 3. Infin. Act. Pres. *volo.*
 4. Ind. Fut. 2nd Plur. *possum.*
 5. Subj. Impf. 3rd Plur. *fi.*
- 10 4. Write the Latin for the following phrases:
 the night before last (abl.); how far, pray? by order
 of the consul; in view of these facts; as many as possible;
 within human memory; for these last five years; pre-
 cedent; no good citizen; as I have often said.

(OVER)

Values.

10 **5.** Give a statement of the Law of Sequence of Tenses in Latin and explain its operation by examples drawn from the Indirect Question.

6. Translate into Latin:

6 (a) The consul at last held his peace; he had said much regarding the crimes of Catiline and had spoken long.

7 (b) On that fatal day I craved for you but learned that you were absent in the country.

7 (c) The Roman senate and people has decreed many honors to your father and to you; whether wisely or not is open to question.

7 (d) He says that Caesar will not break the laws; but who believes his statement?

8 (e) The general replied that he had neither broken his word nor deceived the nation; let them wait till witnesses could arrive from the army.

10 (f) He praised your countrymen again and again in their presence in order to be praised by them in his absence, but the result of this was that they put no confidence in him or his speeches and resolved rather to be on their guard (*caveo*) against being betrayed.



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GRADE XII.

LATIN AUTHORS AND SIGHT TRANSLATION.

Time—Two and one-half hours.

Values.

12 1. Translate into English:

Quae cum ita sint, Catilina, perge quo coepisti. Egredere aliquando ex urbe; patent portae: proficiscere. Nimium diu te imperatorem tua illa Manliana castra desiderant. Educ tecum etiam omnis tuos: si minus, quam plurimos: purga urbem. Magno me metu liberabis, dum modo inter me atque te murus intersit. Nobiscum versari iam diutius non potes: non feram, non patiar, non sinam. Magna dis immortalibus habenda est, atque huic ipsi Jovi Statori, antiquissimo custodi huius urbis, gratia, quod hanc tam taetram, tam horribilem tamque infestam rei publicae pestem totiens iam effugimus.

2 (a) What lends oratorical power to this passage?

4 (b) *Manliana castra, huic ipsi Jovi Statori.* Explain the references.

12 2. Translate into English:

Quibus ego confido impendere fatum aliquod, et poenam iam diu improbitati, nequitiae, sceleri, libidini debitam aut instare iam plane, aut certe appropinquare. Quos si meus consulatus, quoniam sanare non potest, sustulerit, non breve nescio quod tempus, sed multa saecula propagarit rei publicae. Nulla est enim natio quam pertimescamus, nullus rex qui bellum populo Romano facere possit. Omnia sunt externa unius virtute terra marique pacata: domesticum bellum manet; intus insidiae sunt, intus inclusum periculum est, intus est hostis. Cum luxuria nobis, cum amentia, cum scelere certandum est. Huic ego me bello ducem profiteor, Quirites: suscipio inimicitias hominum perditorum. Quae sanari poterunt, quacumque ratione sanabo; quae resecanda erunt, non patiar ad perniciem civitatis manere.

Values.

- 3 (a) *Unius*—To whom does Cicero refer, and what were his exploits?
- 3 (b) Discuss the character of Cicero, bringing out his good qualities and his defects.

12 3. Translate into English:

Mercuri, facunde nepos Atlantis,
qui feros cultus hominum recentum
voce formasti catus et decorae
more palaestrae,

te canam, magni Iovis et deorum
nuntium curvaeque lyrae parentem,
callidum quicquid placuit iocoso
condere furto.

Te boves olim nisi reddidisses
per dolum amotas puerum minaci
voce dum terret, viduus pharetra
risit Apollo

Quin et Atridas duce te superbos
Ilio dives Priamus relictio
Thessalosque ignis et iniqua Troiae
castra fefellit.

Tu pias laetis animas reponis
sedibus virgaque levem coerces
aurea turbam, superis deorum
gratus et imis.

- 3 (a) *Atlantis, Atridas, Priamus*—Write a brief note on each
- 4 (b) Write out a metrical scheme for the second stanza.
What is the metre?
- 3 (c) Summarize the functions of Mercurius, as mentioned by Horace in this and other odes.

12 4. Translate into English:

Aequam memento rebus in arduis
servare mentem, non secus in bonis
ab insolenti temperatam
laetitia, moriture Delli,

seu maestus omni tempore vixeris
seu te in remoto gramine per dies
festos reclinatum bearis
interiore nota Falerni.

Quo pinus ingens albaque populus
umbram hospitalem consociare amant
ramis? Quid obliquo laborat
lympha fugax trepidare rivo?

Values.

Huc vina et unguenta et nimium brevis
flores amoenae ferre iube rosae,
dum res et aetas et sororum
fila trium patiuntur atra.

2 (a) What philosophical doctrine is Horace advancing to
Dellius?

2 (b) To what extent should the Odes be regarded as repre-
senting Horace's philosophy of life?

26 5. Translate into English at sight:

Nunc, ante quam ad sententiam redeo, de me pauca
dicam. Ego, quanta manus est coniuratorum, quam videtis
esse permagnam, tantam me inimicorum multitudinem
suscepisse video; sed eam iudico esse turpem et infirmam
et abiectam. Quod si aliquando alicuius furore et scelere
concitata manus ista plus valuerit quam vestra ac rei
publicae dignitas, me tamen meorum factorum atque
consiliorum numquam, patres conscripti, poenitebit. Ete-
nim mors, quam illi fortasse minitantur, omnibus est parata:
vitae tantam laudem, quanta vos me vestris decretis hones-
tastis, nemo est adsecutus. Ceteris enim semper bene gesta,
mihi uni conservata re publica, gratulationem decrevistis.



HIGH SCHOOL AND UNIVERSITY
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GRADE XII.

PHYSICAL SCIENCE.

Time—Two and one-half hours.

Values.

- 4 **1.** (a) Define the terms: Dyne, moment of a force, poundal, kilowatt.
- 4 (b) Describe an experiment to demonstrate the Law of the Parallelogram of Forces.
- 4 (c) What must be the horse-power of a machine used in raising 1,100 tons of coal through a vertical shaft 450 feet deep in 8 hours.
- 6 **2.** (a) Describe either the Cistern or Aneroid Barometer.
- 4 (b) Barometric measurements are made at the meteorological stations throughout North America. From these measurements show how a weather map may be constructed and weather conditions predicted.
- 4 (c) A body, weighing 90 grams and having a specific gravity 4.5, is suspended in a glass of water placed on a scale pan of a balance. Explain fully why the weight of the glass of water appears to increase and indicate the amount of this increase.
- 3.** (a) Show how the molecular theory serves to explain the following phenomena:
- 2 (1) The unequal rates of diffusion through porous membranes of gases differing in density.
- 2 (2) The diffusion of salt through water.
- 2 (3) The expansion of a gas when heated.
- (b) Write a note on capillary action explaining:
- 4 (1) The ascension of water and the depression of mercury in capillary tubes.

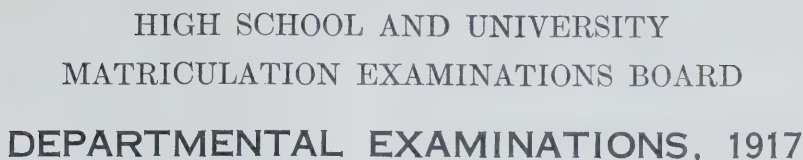
(OVER)

Values.

- 2 (2) The decrease in the ascension or depression as the diameter of the bore of the tube increases.
- 4 4. (a) Compare sound and light waves with respect to the nature of the vibrations and the media required for their transmission.
- 2 (b) A vibrating tuning fork is held over a tube closed at the lower end. Explain fully why the resonance of the air column is greatest when the length of the tube is one-quarter of the wave-length.
- 3 (c) (1) What conditions determine the intensity of sound?
- 2 (2) Why is a sound heard more distinctly at night than one of equal intensity during the day?
- 6 (d) Two steel wires A and B are stretched on sonometers and made to vibrate. The length of A is 100 cm., its diameter 0.64 mm. and its tension 36 Kgm. The diameter of B is 0.32 mm. and its tension 25 Kgm. What must be the length of B if the pitch of the note produced by it is an octave higher than that produced by A?
- 6 5. (a) Describe fully an experiment demonstrating Charles' law.
- 4 (b) Describe an experiment to show the relation between the rate of pressure and the boiling point of water.
- 4 (c) The temperature of a mass of copper, the volume of which is 20 c.cm. and specific gravity 8.9, is raised to 95° C. The copper is then transferred to a vessel containing 117 grams of water at 15° C. and the resulting temperature is 25° C. Calculate the specific heat of copper.
6. (a) Make drawings to show the position and relative magnitude of the image formed in each of the following cases:
- 2 (1) An object is placed between the principal focus and the centre of curvature of a concave mirror.
- 2 (2) An object is placed between the principal focus of a convex lens and the lens.
- 4 (b) Screen A is illuminated by a 16 c.p. lamp 10 feet from it and screen B by a 25 c.p. lamp 15 feet from it. Compare the intensities of illumination.
- 2 (c) Why are parabolic mirrors preferable to concave mirrors in searchlights and headlights?
7. (a) Write a note on the spectrum under the following headings:
- 4 (1) The method of producing a spectrum.
- 4 (2) The method of demonstrating the presence and position of rays not included in the visible spectrum.

Values.

- 4 (b) Describe fully the construction and operation of either the spectroscope or the projection lantern.
- 4 8. (a) State fully the theory of the action of a Voltaic cell.
- 4 (b) What products are obtained by the electrolysis of a solution of common salt? Explain the results from the point of view of the ionization theory.
- 4 9. (a) State the laws of induced currents.
- 4 (b) How may one verify these laws experimentally?
- 6 (c) Describe the construction and state the uses of either a transformer or a Wheatstone Bridge.
- 6 10. (a) What would be the cost of obtaining light from a chandelier containing 50 sixteen candle-power incandescent bulbs, each bulb requiring 0.5 amperes of current at a voltage of 110 volts, the light being used for a period of 5 hours and the rate of charge being $7\frac{1}{2}$ c per kilowatt hour?
- 6 (b) The length of a copper wire is 2 km. and the area of its cross-section is 5 sq. mm. If it offers a resistance of 6.32 ohms, find the specific resistance of copper.



ARITHMETIC.

Values.

- Richard White.

Sept. 15, 1898.....	\$450
Dec. 15, 1898.....	50
March 1, 1899.....	500
Jan. 1, 1900.....	1,000

15 **5.** Willie Smith deposits \$350 with a Trust Company each year making his first deposit Dec. 31, 1911. How much will there be to his credit Jan. 1, 1916, the Trust Company allowing 4% annually?

(OVER)

Values.

- 10 **6.** A note of \$2,450 dated Halifax, June 1, 1916, for four months bearing interest at 6% is discounted at a bank on Aug. 15 at 8%. Find the proceeds.
- 10 **7.** A house which cost \$15,000 rents for \$125 per month. It is insured for $\frac{3}{4}$ of its value at the rate of $\frac{3}{4}$ of 1% for three years, the taxes are $18\frac{1}{2}$ mills on an assessment of \$14,000 and \$312.88 is spent each year in repairs. What rate of interest does the investment pay?
- 15 **8.** I borrow \$6,000 at 6% compound interest and agree to pay it off in four equal annual instalments of interest and principal. Find the amount of the annual payment.



HIGH SCHOOL AND UNIVERSITY
MATRICULATION EXAMINATIONS BOARD
DEPARTMENTAL EXAMINATIONS, 1917

SECOND YEAR—COMMERCIAL.

RAPID CALCULATION.

Time—Thirty minutes.

NOTE.—Results only are to be written on this paper, which is to be handed in to the presiding examiner along with the other paper on Arithmetic.

Values.

- 15 1. Add vertically and horizontally the following statement and prove by grand total each way:

	1.	2.	3.	4.	5.	Totals
1911	\$3,862.93	1,391.76	6,760.68	1,098.91	1,696.65	
1912	396.74	6,168.37	864.39	964.26	167.69	
1913	1,768.63	467.89	2,035.68	3,165.03	691.83	
1914	3,976.98	76.05	364.76	93.68	1,948.39	
1915	263.76	1,035.84	36.10	386.41	3.45	
1916	1,559.83	1,932.57	1,268.15	8.37	279.72	

Totals

Grand Total.

- 8 2. If the price of coal be raised 10% how much per cent. must a man reduce his consumption so as not to increase his expenses?
- 8 3. How many oranges must a boy buy and sell to make a profit of \$1.20 if he buys at the rate of 5 for 3 cents and sells at the rate of 4 for 3 cents?
- 6 4. An article is listed at \$16.80. Find the net price after deducting the following discounts: $33\frac{1}{3}$, 25, 20 and $12\frac{1}{2}$.
- 5 5. Find the simple interest on \$1,590.00 for 3 years 73 days at 6%.

(OVER)

Values.

8 **6.** Make extensions and show total of invoice:

18 bbls. B.C. Sugar: 208, 209, 214, 207, 206, 198,
199, 204, 206, 207, 209, 210, 214, 198, 199,
201, 203, 209 @ \$4.75 per cwt.....

9 bbls. Coffee Sugar: 212, 214, 217, 199, 198, 201,
207, 206, 207 @ \$4.50 per cwt.....

7 chests Tea Ceylon: 68-7, 69-8, 66-7, 68-9, 67-8,
69-8, 67-8 @ $23\frac{1}{2}$ c per lb.....

5 bags Coffee-Java: 47-4, 43-5, 41-3, 40-4, 42-3,
@ $27\frac{1}{2}$ c. per lb.....

Total.....



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DEPARTMENTAL EXAMINATIONS, 1917

SECOND YEAR—COMMERCIAL

GEOGRAPHY.

Time—Two and one-half hours.

Values.

- 15 **1.** Name in order of importance ten of the commercial centres of Canada and state briefly to what you attribute the importance of each.
- 10 **2.** Write a short note on the Levant under the headings of situation and commerce.
- 5 **3.** (a) Name the chief physical and political conditions on which the industrial and commercial prosperity of a nation depends.
- 5 (b) How far do these conditions apply to Russia, Australia, Canada and Brazil?
- 5 (c) Describe the trade of Australia stating by what routes this trade is brought into contact with other parts of the Empire.
- 9 **4.** Compare India and Egypt as to Climate, Products and Exports.
- 8 **5.** (a) Account for Great Britain's supremacy in trade among the nations of the world.
- 9 (b) From what countries does Great Britain receive her chief supply of each of the following: Wheat, wool, sugar, petroleum, timber, hides?
- 10 **6.** Describe the paper and pulpwood industries in Canada showing the source of raw material, method of manufacture and markets.
- 9 **7.** By comparison with existing trade routes point out the commercial advantages of the Panama Canal to Great Britain and her colonies.

(OVER)

Values.

8. In what parts of the British Empire are the following industries of prime importance? Indicate the chief markets in each case.

5 (a) Salmon and cod fisheries.

5 (b) Nickel and gold mining.

5 (c) Wool and woollen manufactures.

100



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SECOND YEAR—COMMERCIAL

PENMANSHIP.

Time—Forty-five minutes.

Values.

- 15 1. Write a line of each of the following letters singly, then a line of each joined in groups of three: c, u, r, s, b, f, k, h, y, z, p, q, t, d.
- 20 2. Write a line of each of the capital letters, each capital to be followed and connected (where possible) with two small letters.
- 15 3. Write a line of each of the following words: amanuensis, assessor, commission, stutter, ditto, bluffer, thistle, fluffy, wrangler, oppressor, hurrah.
- 25 4. Copy the following letter:

Hamilton, Ont.,
Dec. 29th, 1920.

Mr. James K. Hubbard,
Banff, Alberta.

Dear Sir,—

In reference to your letter of 25th inst. making application for Preference Shares in this company, I am requested by the Directors to inform you that they are unable to comply with your request.

It may possibly happen at some later date that a shareholder may desire to transfer a portion of this stock. In such a case we shall be pleased to notify you of the fact.

Enclosed herewith you will find cheque for Fifty Dollars on the Company's bankers, which amount you remitted on application.

I am, Sir,

Your obedient Servant,

Ralph Somerville,

Secretary.

(OVER)

Values.

25 5. Copy the following invoice (without ruling columns):
The Hillcrest Grocery Co., Hamilton, July 12th, 1916.
Penticton, B.C.
Terms: Net, 30 days. Bought of John Johnson & Co.

6 bbl. Yellow Sugar	
310-21, 295-20, 305-22	
308-22, 341-21, 306-21	
=1865-127=1738 @ \$7.91 per cwt.....	\$137.47
6 bbl. Granulated Sugar	
280-20, 298-21, 301-22	
290-21, 294-20, 297-20	
=1760-124=1636 @ \$7.51 per cwt.....	122.86
6 hf chests China Hyson Tea	
65-10, 64-9, 59-9	
64-19, 63-10, 62-10	
=377-57=320 @ 17c.....	54.40
	\$314.73



HIGH SCHOOL AND UNIVERSITY
MATRICULATION EXAMINATIONS BOARD
DEPARTMENTAL EXAMINATIONS, 1917

SECOND YEAR—COMMERCIAL

SPELLING.

NOTE.—Two marks will be deducted for each error in spelling.

Time—One hour.

Total value 100 marks.

- | | | |
|--------------------|------------------|--------------------|
| 1. knowledge | 26. adaptability | 51. merger |
| 2. discipline | 27. involving | 52. moccasins |
| 3. privilege | 28. analogy | 53. automatically |
| 4. conscientious | 29. analysis | 54. unanimous |
| 5. facility | 30. separate | 55. haphazard |
| 6. envelope | 31. desperate | 56. definite |
| 7. development | 32. intrigue | 57. conceded |
| 8. defendant | 33. intricate | 58. prosperous |
| 9. vigilant | 34. emergency | 59. municipal |
| 10. confident | 35. honorarium | 60. drastic |
| 11. calendar | 36. signature | 61. legitimate |
| 12. indispensable | 37. amateur | 62. representative |
| 13. explicit | 38. independent | 63. dependable |
| 14. correspondence | 39. ineffective | 64. unaffected |
| 15. promissory | 40. politician | 65. ascertain |
| 16. vertical | 41. democracy | 66. negligence |
| 17. complimentary | 42. accumulate | 67. customary |
| 18. advantageous | 43. accommodate | 68. intelligence |
| 19. principles | 44. disappoint | 69. detrimental |
| 20. brokerage | 45. infinite | 70. unprecedented |
| 21. demurrage | 46. financial | 71. menace |
| 22. suitability | 47. organization | 72. continuance |
| 23. reservoir | 48. economical | 73. reversal |
| 24. expansion | 49. amalgamate | 74. debris |
| 25. transmission | 50. statistician | 75. recurrence |

That an income tax in practice involves evasions and inequalities is true: but not evasions and inequalities at all comparable to those existing under our present system.

The following passage from *The Economist*, London, is far more applicable surely to Canada than to Great Britain: "The time has come for an increase in our rate of taxing. This is all the more true since taxing is needed now not only for getting revenue, but also,

(OVER)

perhaps more so, for stopping the waste which is still riotously prevalent, especially among those to whom war has given increased spending power without teaching them the lesson of economic responsibility and a sense of patriotism in money matters.

"From time to time the government issues to the public through the agency of some war savings committee very nicely expressed appeals for increased economy in private expenditure. But when the nation needs both public revenue and private economy, the business of a Chancellor of the Exchequer is not only to talk persuasively, but to tax vigorously.

"Economy has to be enforced through inflation and higher prices or through taxation and reduced spending. Inflation carries with it serious political dangers and is grossly unfair to the poor. Taxation is the straightforward and equitable course." (Canadian Finance.)



HIGH SCHOOL AND UNIVERSITY
MATRICULATION EXAMINATIONS BOARD
DEPARTMENTAL EXAMINATIONS, 1917

SECOND YEAR—COMMERCIAL

BUSINESS ENGLISH AND COMMERCIAL
CORRESPONDENCE.

Time—Two and one-half hours.

Values.

- 30 1. Briefly explain and illustrate by use in sentences, the meaning of each of the following words or phrases: Respectively, respectfully, under separate cover, illusion, allusion, concurrent, ensuing, special delivery stamp, letter-gram, telegraphic code, circular letter, follow-up system, vertical files, stencil.
- 30 2. Using fictitious names throughout, write a letter of at least eighty words making application for a position in the office of a wholesale firm.
- 30 3. Put the following letter in correct form, with correct spelling, paragraphing and punctuation:
- calgary alta apl 3 1917 j m mcdonald esq 413 barbo st
havana cuba dear sir i have observed in canadian trade
journals that you have been recently appointed agent for
the canadian government in the west indias i am a manu-
facturer desirous of extending the market for my goods
and wish to obtain the name of reliable comission mer-
chants handling lines of produce i am especially desirous
of getting buisness in high grades of flour on consignment
if you can also give me information as to the best shipping
rousts and rates i can determine whether i can engage in
such trade with a likelihood of profit kindly send this
information at your earliest convenience thanking you in
antisipation i am yours very truly alexander miller.

(OVER)

Values.

- 35 4. Write an essay of at least one page, and of not more than two pages of foolscap on one of the following topics:
The Agricultural and Mineral Resources of Alberta.
The Peace Negotiations of 1916-17.
The Effect of the War upon the Dominion of Canada.
The Commerce of Neutral Nations during war.



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MATRICULATION EXAMINATIONS BOARD
DEPARTMENTAL EXAMINATIONS, 1917

SECOND YEAR—COMMERCIAL

COMMERCIAL LAW AND BUSINESS FORMS.

Time—Three hours.

Values.

- 10 **1.** Briefly explain the following terms: Ad valorem; surety; codicil escrow; hypothecation.
- 10 **2.** Explain what is meant by the term “legal incapacity to contract” and name five classes of persons which the law protects in this behalf.
- 10 **3.** John Smith, a contractor, agrees to build a house for Henry Jones, a merchant. Draft a simple form of contract which might be used by the parties, supplying date, price and other necessary particulars.
- 5 **4. (a)** Explain the expression “innocent holder for value.”
- 5 **(b)** Under what circumstances may “an innocent holder for value” of a promissory note obtain a better title than the original payee possessed?
- 5 **5. (a)** What is meant by negotiability with reference to documents?
- 5 **(b)** Some documents are negotiable by endorsement and some by assignment. Explain this statement and give an example which comes within each class.
- 10 **6.** Write a concise note on mortgages commenting upon the following points among others: personal covenant; power of sale; foreclosure; equity of redemption and discharge.
- 10 **7.** If two or more persons are associated in business how may it be known whether or not they are subject to the partnership law? State the two prime tests of partnership.
- 10 **8.** State at least five causes which may lead to a dissolution of partnership.

(OVER)

Values.

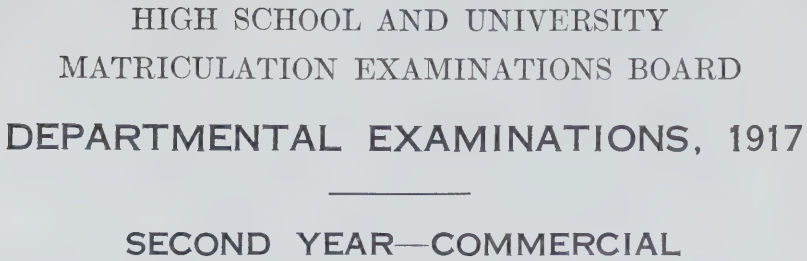
5 **9.** (a) If a monthly tenant wishes to vacate the premises what notice must he give the landlord?

5 (b) Explain the following: Overholding tenant; exemptions; quiet enjoyment; tenant's set-off; distraint.

10. Explain and give an example of each:

5 (a) Instalment Note.

5 (b) Joint and Several Note.



Time—Three hours.

Values.

- Give two examples of entries that might appear in (a) but foreign to (b), and conversely give two entries that might appear in (b) but could not be correctly included in (a).

- 6 (a) Fixed Assets and Liabilities.
- 6 (b) Current Assets and Liabilities.

- Depreciation, Bad Debts, Suspense, Goodwill, Preliminary Expenses, Bills Receivable, Accounts Payable, Reserve, Interest Receivable and Purchases.

Write a few lines describing the nature of each, and how in most businesses the need of these accounts arises. State those that might be either debit or credit balances and if debit what it betokens.

- (OVER)

Values.

- 21 **5.** A ledger after being closed for the year shows among the Assets and Liabilities the following balances:

	Dr.	Cr.
Merchandise Account.....	\$5,764.30	
Rent Account.....		\$250.00
Insurance Account.....	345.00	
Wages Account.....		225.00
Advertising Account.....	1,537.00	
Taxes Account.....	230.00	
Profit and Loss Account.....	840.00	

Explain the meaning of these balances and the circumstances under which they have been created.

- 8 **6.** State clearly what you understand by: Controlling Accounts and Subsidiary Ledgers.
- 15 **7.** Describe the Imprest System of Petty Cash. Give a ruling for a form which might be used and enter up a few items to show the operation of the account.



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SECOND YEAR—COMMERCIAL

PRACTICAL BOOKKEEPING AND ACCOUNTANCY.

Time—Three hours.

Values.

- 20 1. The firm of Smith & Jones make an assignment and present this Balance Sheet of Smith & Jones:

Assets.		Liabilities.	
Cash.....	\$ 300.00	Mortgage on Land...	\$30,000.00
Accounts Receivable	5,000.00	Bills Payable.....	7,500.00
Merchandise.....	4,350.00	Accounts Payable....	6,000.00
Office Furniture....	350.00	Capital Smith..	6,000
Machinery & Plant..	3,500.00	Jones..	4,000
Land & Buildings..	40,000.00		10,000.00
	<u>\$53,500.00</u>		<u>\$53,500.00</u>

The assets have to be depreciated as follows:

Land and Buildings.....	25%
Merchandise.....	15%
Machinery.....	10%

On going over the Accounts Receivable it is found that \$3,000 are good, \$1,500 doubtful and \$500 bad, but for the purpose of the statement 10% is to be deducted from the good, 50% from the doubtful and the bad are not to be considered.

Prepare Statement of Affairs and Deficiency Account.

- 15 2. The business of White & Black for the half year ended December 31, 1916, shows a Gross Profit from Trading Account of \$3,996.00. The Rent was \$300, Taxes \$75, Salaries \$500, Sundry Expenses \$250. White's Capital at last closing was \$3,500, Black's was \$2,000. White's drawings since last closing were \$600, Black's \$500. Each partner is to receive 5% interest per annum on Capital. Draw up and close Profit and Loss Account and the Partners' Accounts apportioning 7-11 of the net profit to White and 4-11 to Black.

Values.

- 20 3. The Enterprise Manufacturing Company was incorporated with an authorized capital of \$600,000 divided into 3,500 shares of preferred stock and 2,500 shares of common stock of \$100 each. The incorporators were D, E, F, G, H, I and J who subscribed for one share each. They purchase the business of A, B and C who present the following Balance Sheet:

Balance Sheet of A, B and C.

Assets.	Liabilities.
Building & Real Estate \$100,000	Bills Payable..... \$15,000
Plant..... 50,000	Accounts Payable..... 35,000
Bills Receivable..... 25,000	Capital Accounts—
Stock on Hand..... 150,000	A..... 150,000
Cash at Bank..... 15,000	B..... 120,000
	C..... 80,000
\$400,000	\$400,000

The Vendors are to receive for their Surplus Assets, Preferred Stock and for the Goodwill of the business \$700 Cash and the balance of the Common Stock.

Make the opening Journal Entries in the Company's Books, the \$700 cash is used to pay for the incorporators' stock.

Show the division of the Capital Stock as between A, B and C. As partners they shared profits equally.

- 20 4. X, Y and Z are in partnership having \$15,000, \$10,000 and \$5,000 to their respective capital accounts. They share gains and losses equally. At that time they admit Q as a partner, he to invest \$10,000 for which he is to get one-fifth interest in the net assets and goodwill of the business, also to share equally in the gains and losses with the other partners.

Make journal entries for the transactions and give Balance Sheets showing how much stands to the credit of each partner:

- (a) With a Goodwill Account on the books.
- (b) Without a Goodwill Account.

Values.

25 5. Brooks and Ross are in business and at January 1, 1917, the Trial Balance of their Books is as follows:

Stock on hand Jan. 1, 1916.....	\$15,000.00	
Purchases.....	38,000.00	
Sales.....		\$95,000.00
Plant & Machinery.....	35,000.00	
Labor.....	24,000.00	
Salaries.....	6,000.00	
Travelling Expenses.....	2,500.00	
Interest.....	600.00	
Bank Overdraft.....		5,000.00
Creditors.....		4,000.00
Stationery & Printing.....	1,200.00	
Rent & Taxes.....	3,500.00	
Discounts and Allowances.....	1,250.00	
Fuel.....	3,000.00	
Insurance (1 year from July 1, 1916)	1,150.00	
Freight.....	1,500.00	
General Expense.....	600.00	
Accounts Receivable.....	25,000.00	
Rent of Steam Power.....		1,500.00
Cash on Hand.....	200.00	
Loan Account.....	7,000.00	
Capital—Brooks.....		40,000.00
Capital—Ross.....		20,000.00
	\$165,500.00	\$165,500.00

Stock on hand January 1, 1917, \$23,000.00; each partner to be credited 6% on his capital for one year before profits are ascertained; 3% to be written off Book Debts; 10% to be written off machinery and plant for depreciation; unexpired insurance to be taken into account; net profit to be divided $\frac{2}{3}$ to Brooks and $\frac{1}{3}$ to Ross.

Draft Journal entries for closing the books and prepare Trading and Profit & Loss Accounts and final Balance Sheet.





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DEPARTMENTAL EXAMINATIONS, 1917

SECOND YEAR—COMMERCIAL

STENOGRAPHY PRACTICE.

Note to the presiding examiner.—This paper is not for distribution. Candidates are not to see it. The examiner should read it through carefully before beginning to dictate. The rate of dictation is indicated throughout, quarter minutes being indicated by single lines and whole minutes by double lines. A pause of one-half minute may be made between sections. A short interval may be allowed between the conclusion of the dictation and the beginning of the transcription, while the candidates see to the adjustment of their typewriters, insert paper and carbon for the first letter and receive the following instructions from the examiner. A carbon copy is required for the first letter only. *Each section is to have a separate sheet of paper.* All candidates should begin transcription on the machine at the same instant, and be required to turn in both their typewritten and their shorthand notes at the expiration of *one hour* from that instant.

Values.

20 1.

Calgary, June 5, 1917.

Brown & Co.,
Edmonton.

Gentlemen,—

As you would gather from our telegram of enquiry this morning we have again experienced difficulty/with the Alberta Express Company over the failure to secure prompt delivery of your shipment of Saturday last. Upon receipt of your reply that you held/receipt for the goods and that they should have reached us early Monday morning we made a personal investigation with the result that the/Express Company had to confess their error. It seems that a clerk mis-read the address and deciding that it was outside the delivery limits//had stored the parcel in the warehouse and mailed a card of notification. This being sent to the wrong address is still somewhere in the mails/. Meantime however we have obtained the parcel, and the Express Company has refunded the cost of our telegrams. The results are not as serious as/they might have been as our customer was able to get along until the goods were

Values.

found. However, if we have any further difficulty of this nature, we shall have to ask you to ship through another company.

You may send a repeat of our order of Saturday upon receipt of this letter.

Yours truly,

- 25 2. The Prairie Coal Co.,
 Saskatoon.

Dear Sirs,—

We have your enquiry of the 14th inst. and have pleasure in quoting you a price of \$5.00 per ton for best Screened Lump Coal, and of \$4.50 per ton for Mine Run. This price is for car lots in each case f.o.b. Grand Trunk cars, Saskatoon, and the terms are cash in 30 days. We do not think you can obtain a better quotation than this for prompt delivery. We could not do as well by the other lines of railway as the Grand Trunk has built a siding to the mouth of our mine and we can load cars at the minimum of expense. Should you desire to place a trial order with us we should advise prompt action as if the weather should turn colder there would undoubtedly be a great rush of orders resulting in unavoidable delays through the inability of the railway to supply more than a stipulated number of cars daily.

We take the liberty of drawing your attention to the fact that we are also agents for fire-wood, and in case you might be in the market for other kinds of fuel we enclose our printed price list. We are sure we can give you complete satisfaction if you see fit to place an order with us.

Yours very truly,

- 25 3. Business men on this continent are gradually coming to see the wisdom of the European method namely that of holding a man as a public offender if he has a fire unless he can show that he was not responsible for it. In France, if a man has a fire and it goes outside his premises and damages his neighbor's property, he has to pay his neighbor's loss. That is very educative. In Germany, if you have a fire, the first person who calls upon you is a policeman. He locks you up and you have to go before a court and prove that you were in no wise responsible, either by neglect or purpose, or you have to pay the cost of the fire and pay the city for the cost of extinguishing it as well. It is that penalty which is appealing to the imagination of the business men of America to-day—to assess the cost of fighting the fire on the man who has a preventable fire, especially if he disobeys any fire protection or fire department order.

30 4. The President, in his address to shareholders, said:

I had hoped when I last had the pleasure of addressing you/that before this annual meeting the end of the cruel and devastating war, which has convulsed Europe would be, if/not reached, at least within measurable distance. In this expectation we have been disappointed. No one can fix the day/of its termination, but I am sure I express your feelings when I say we hold an unshaken confidence of//the ultimate victory of Britain and her Allies.

The year has again been one of considerable anxiety to all those engaged/in financial affairs. Our profits have been curtailed by payments of Government taxes at home and abroad, while earnings on/loans in Canada have been affected by reduced borrowings on the part of our customers. It is not, however, an/unfavorable feature that the prosperity of large manufacturing industries and business in general has produced a curtailment of bank loans//and converted borrowers into depositors. The low rates of interest on that portion of our reserves carried in New York/have also been a contributing factor to diminished earnings compared with those before the war. But despite these disabilities, we/have been able, after making what we believe to be full provision for bad and doubtful debts, to pay our/usual dividends with the customary bonus and to carry a balance to credit of Profit and Loss Account. I trust,//therefore, that under the circumstances you will consider the results of the banking year satisfactory.



HIGH SCHOOL AND UNIVERSITY
MATRICULATION EXAMINATIONS BOARD
DEPARTMENTAL EXAMINATIONS, 1917

SECOND YEAR—COMMERCIAL

TYPEWRITING.

FIRST SECTION—SPEED.

Time—Thirty minutes.

Candidates may be allowed three minutes to glance over this section of the paper after which thirty minutes will be given to copy it. Each of the three portions should be written on separate sheets with carbon copies throughout. Candidates reaching the end of this section before the expiration of the thirty minutes may begin the paper over again. Results will be marked in accordance with International Rules. On this section of the paper candidates must obtain a net rate of 30 words per minute in order to be entitled to a pass mark.

1.

Gentlemen:

On the 15th instant I forwarded you an order asking that you send it immediately by freight and saying that it must not reach here later than the 25th instant. It is now the 28th and there is no sign of the goods nor yet any news of them having left your warehouse. You must understand that this has caused me great inconvenience and has been the source of much annoyance to several of my best customers who are depending upon me for prompt supplies. If you had let me know that you could not fill the order promptly I should have been able to order elsewhere. As it is, I have let the matter stand until this late date and am still looking to you for the goods.

Kindly wire me at once upon receipt of this letter to say whether the shipment has left and when I may expect it to arrive here. If it has not left your warehouse, please cancel the order.

As you have always hitherto been very prompt in your business dealings I feel that there must be some satisfactory explanation and trust that your telegram will clear up the situation.

Yours truly, (200 words.)

2.

WHEREAS there have been divers accounts, dealings and transactions between the said parties hereto, respectively, all of which have now been finally adjusted, settled and disposed of and the said parties hereto have respectively agreed to give each other the mutual release and discharge hereinafter contained in the manner hereinafter expressed:

NOW THEREFORE THESE PRESENTS WITNESSETH that in consideration of the premises and the receipt of the sum of One Dollar (\$1.00), of lawful money of Canada by each of them, the said parties hereto respectively, paid by each of them at or before the sealing and delivery hereof, the receipt of which is hereby acknowledged, each of them, the said parties hereto, respectively, doth hereby for himself and herself respectively, his and her respective heirs, executors, administrators and assigns, remise and release and forever acquit and discharge, all his, her and their lands, tenements and appurtenances, goods, chattels, estate and effects respectively, whatever, and wheresoever, of and from all debts, sum and sums of money, accounts, reckonings, actions, suits, cause and causes of action and suit, claims and demands whatsoever, either at law or in equity, or, otherwise howsoever, which either of the said parties now have, or has or ever had, or might or could have, against the other of them, on any account whatsoever or concerning any matter, cause or thing whatsoever between them, the said parties hereto, respectively, from the beginning of the world to the date of these presents. (243 words.)

3.

The allied governments have received the note which was delivered to them in the name of the government of the United States on the nineteenth of December, 1916. They have studied it with the care imposed upon them, both by the exact realization which they have of the gravity of the hour, and by the sincere friendship which attaches them to the American people.

In a general way they wish to declare their respect for the lofty sentiments with which the American note is inspired, and their whole-hearted agreement with the proposal for the creation of a league of nations to insure peace and justice throughout the world. They recognize all the advantages for the cause of humanity and civilization which the institution of international agreements, destined to avoid violent conflicts

between nations, would bring about, agreements which must imply the sanctions necessary to insure their execution, and thus to prevent an apparent security from only facilitating new aggressions. But a discussion of future arrangements for assuring a durable peace presupposes a satisfactory settlement of the present conflict; the Allies have as profound a desire as the government of the United States to terminate as soon as possible a war for which the central empires are responsible and which inflicts such cruel sufferings upon humanity. But in their judgment it is impossible to obtain at this moment such a peace as will not only secure them the reparation, the restitution and the guarantee justly due them by reason of the act of aggression, the guilt of which is fixed upon the central powers, while the very principle from which it sprang was undermining the safety of Europe; and at the same time such a peace as will enable future European nations to be established upon a sure foundation. The allied nations are conscious that they are not fighting for selfish interests, but above all to safeguard the independence of peoples, of right and of humanity.

The Allies are fully aware of the losses and suffering which the war causes to neutrals as well as to belligerents and they deplore them; but they do not hold themselves responsible for them, having in no way either willed or provoked this war, and they strive to reduce these damages in the measure compatible with the inexorable exigencies of their defense against the violence and the wiles of the enemy.

It is with satisfaction, therefore, that they take note of the declaration that the American communication is in no wise associated in its origin with that of the central powers, transmitted on the 18th of December by the government of the United States. They did not doubt, moreover, the resolution of that government to avoid even the appearance of a support, even moral, of the authors responsible for the war.

The allied governments feel it their duty to challenge in the most friendly but also in the clearest way, the analogy; based on public declarations of the central powers, is in direct conflict with the evidence both as regards responsibility for the past and guarantees for the future. President Wilson, in alluding to this analogy, did not, of course, intend to adopt it as his own.

If there is any historical fact established at the present date, it is the wilful aggression of Germany and Austria-Hungary to insure their hegemony over Europe and their economic domination over the world.

By her declaration of war, by the instant violation of Belgium and Luxemburg, and by her methods of warfare, Germany has proved she systematically scorns every principle of humanity

and all respect due to small states ; more and more as the struggle has progressed has the attitude of the central powers and their allies been a constant challenge to humanity and civilization.

(629 words.)

SECOND SECTION.

Time—Fifteen minutes.

EXPENDITURE.

ELECTRIC LIGHT AND POWER DEPARTMENT.

REVENUE AND EXPENDITURE ACCOUNT FOR YEAR ENDED
31st OCTOBER, 1911.

POWER..... \$145,545.66

OPERATION OF DISTRIBUTION SYSTEM.

Wiring Inspection.....	\$1,304.00	
Shop Expense.....	300.53	
Stable Expense.....	403.26	
Salaries of Supt. and Office Staff..	10,328.75	
Fuel, Light, Telephone and Water..	319.85	
Advertising, Printing, Postage and Stationery.....	1,838.42	
Rent and Insurance.....	876.00	
Miscellaneous Expense.....	294.44	
Proportion of Central Administra- tion.....	1,333.32	
		16,998.57

MAINTENANCE OF DISTRIBUTION SYSTEM.

Buildings, Furniture and Fixtures..	160.80	
Aerial Mains and Services.....	4,800.83	
Meters.....	834.33	
Transformers.....	159.38	
Street Lamps.....	1,495.55	
Nernst Lamps (on hire).....	432.46	
Instruments and Tools.....	54.23	
Live Stock and Vehicles.....	322.15	
		8,259.73

INTEREST AND REDEMPTION.

Debenture Interest and Redemption	11,813.97	
Bank Interest and Exchange.....	26.53	
		11,840.50

SPECIAL.

Claims for compensation and legal. \$	94.97	
Discount and debentures sold.....	47.53	
Shortage of stock.....	2,181.16	
		\$ 2,323.66
		\$184,968.12
Balance to net revenue—surplus for year.....	24,949.54	
		\$209,917.66

REVENUE.

LIGHT AND POWER.

Private Lighting.....	\$170,096.65	
Power.....	23,469.18	
Street Lighting.....	14,000.80	
		\$207,566.63

MISCELLANEOUS.

Nernst Lamp Rentals.....	410.00	
Application and Permit Fees.....	2,569.04	
Profits on sales and jobbing.....	3,060.10	
Premium on debentures sold.....	52.51	
		6,100.65
		\$213,667.28
Less—Discounts.....	6,272.27	
Provision for bad and doubtful debts	344.67	
		6,616.94
		\$207,050.34
Interest on unexpended balances.....	2,867.32	
		\$209,917.66

